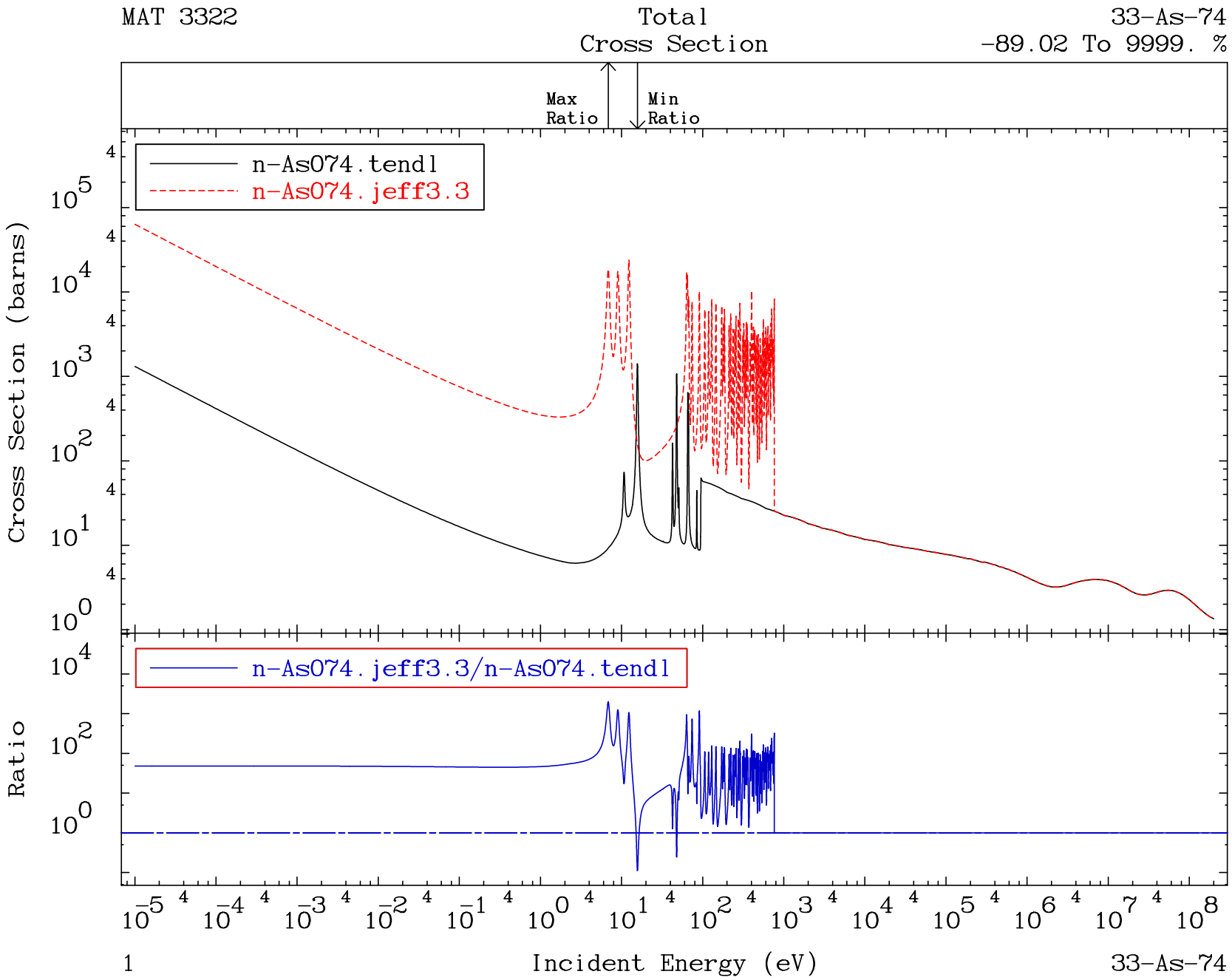
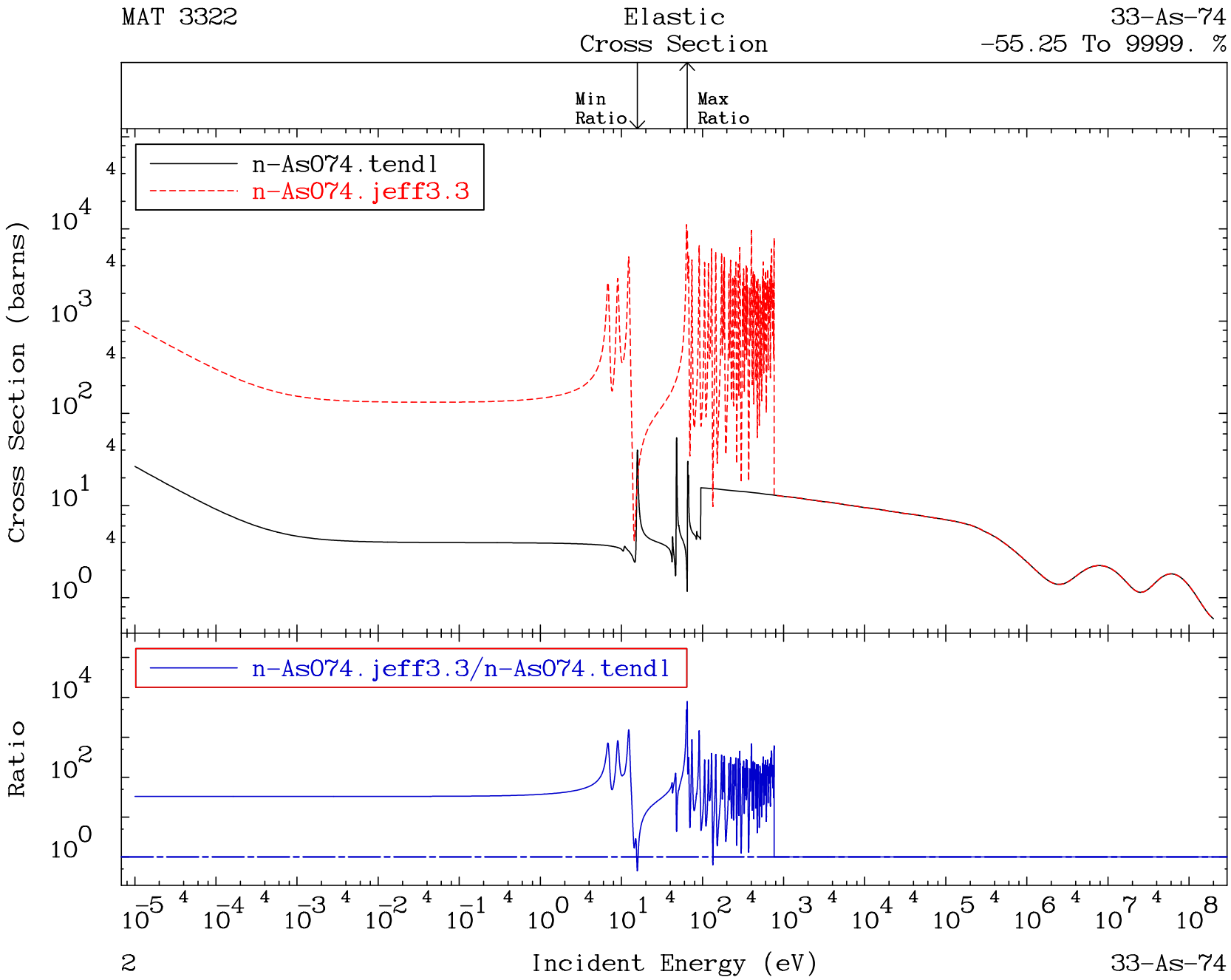
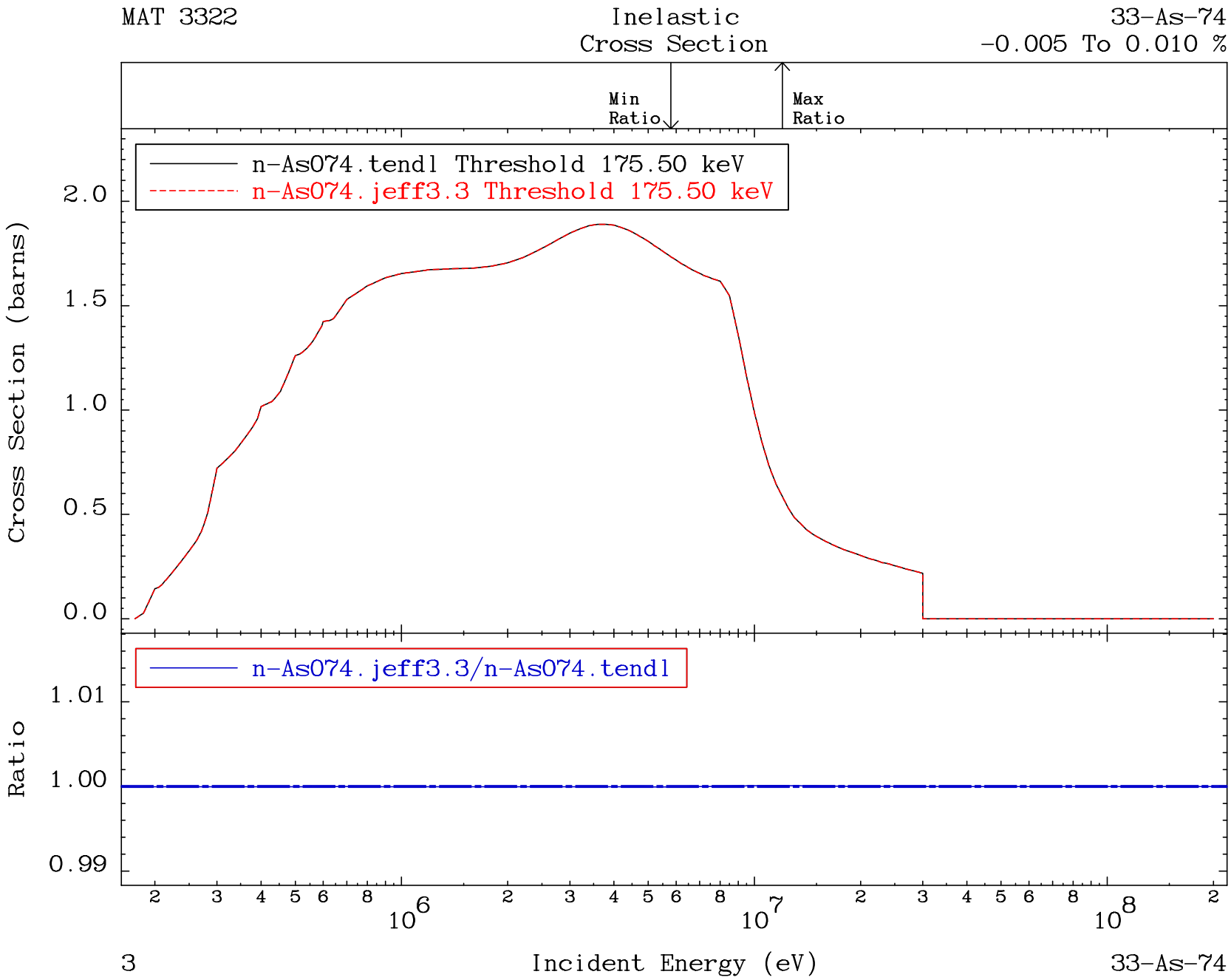
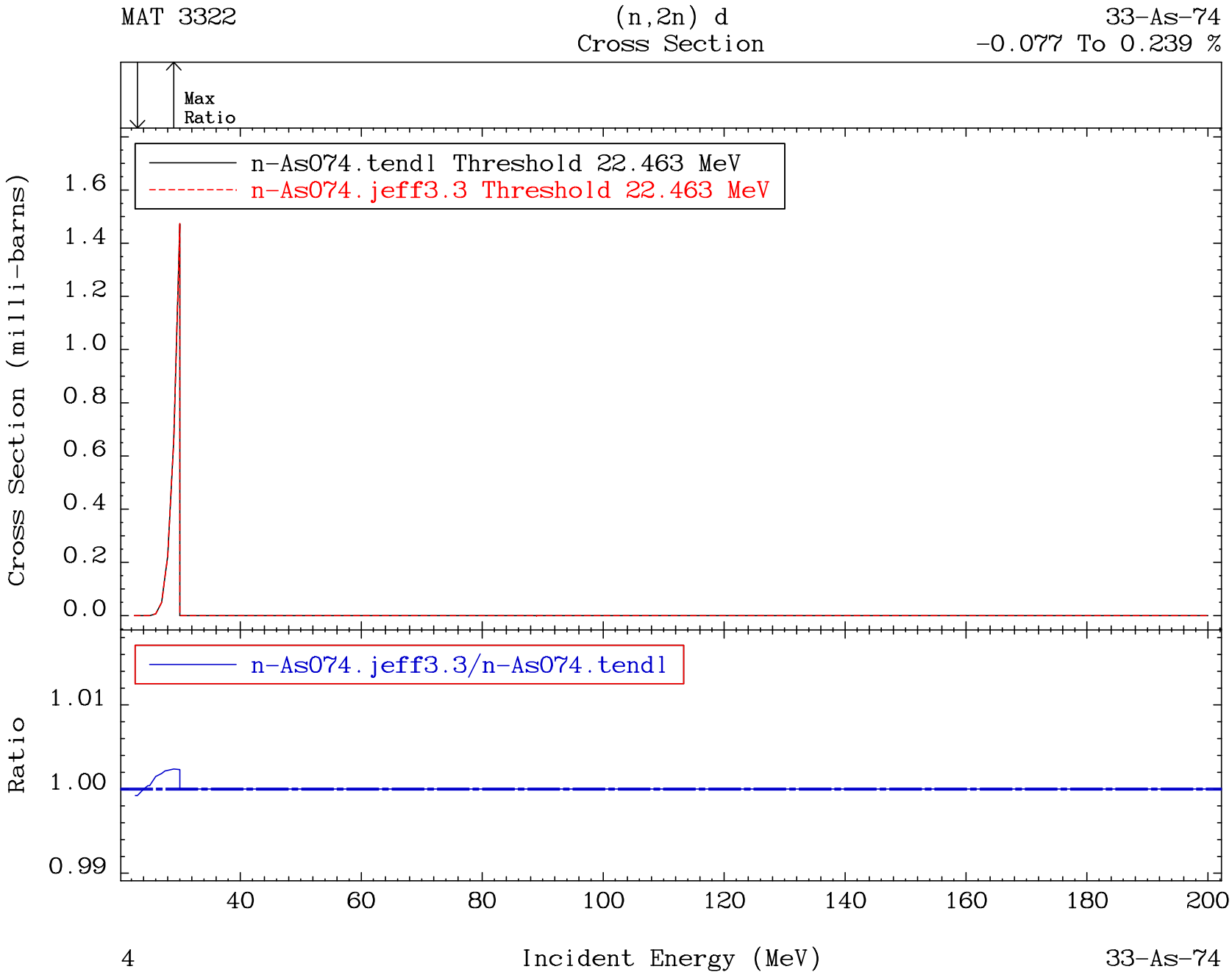
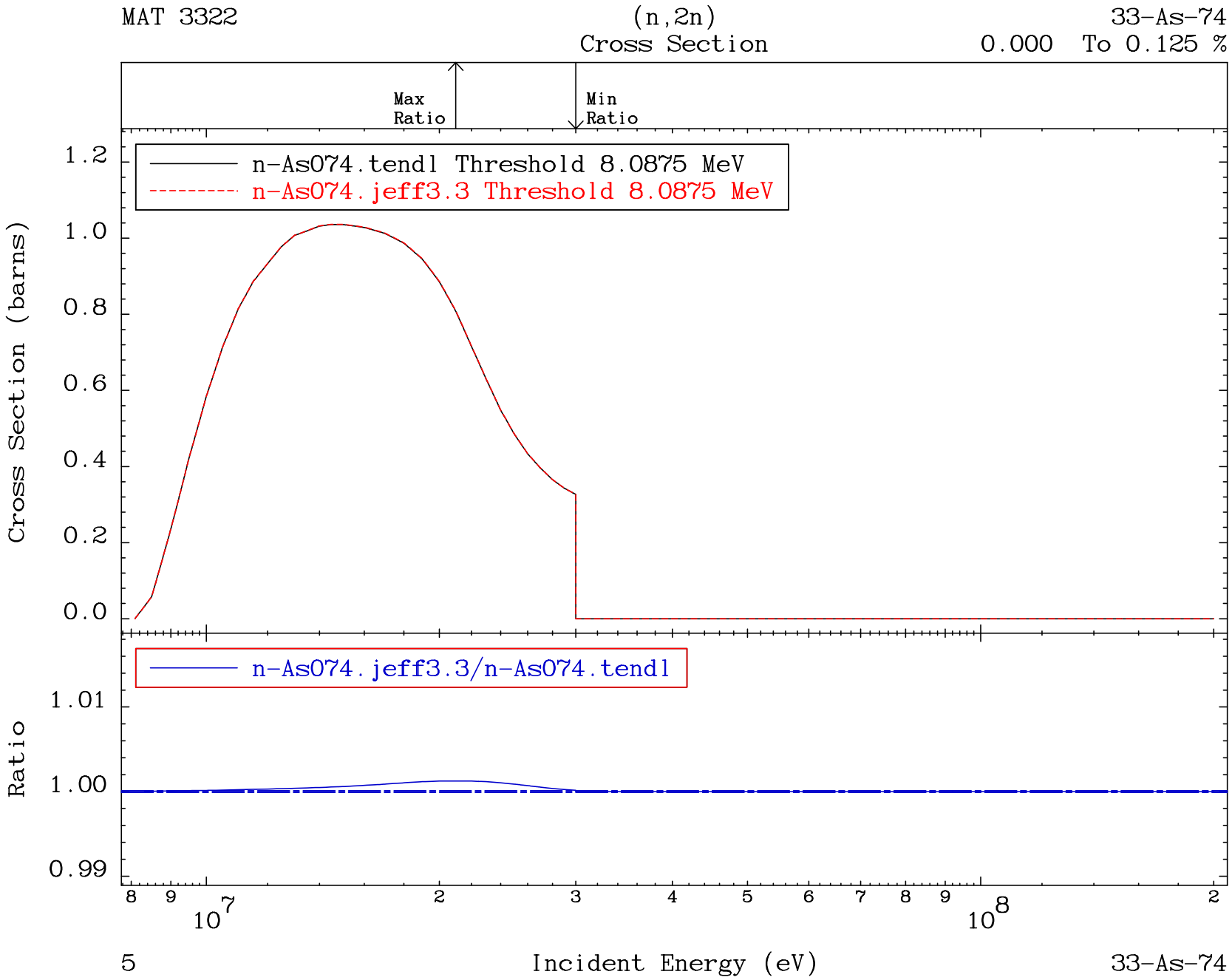
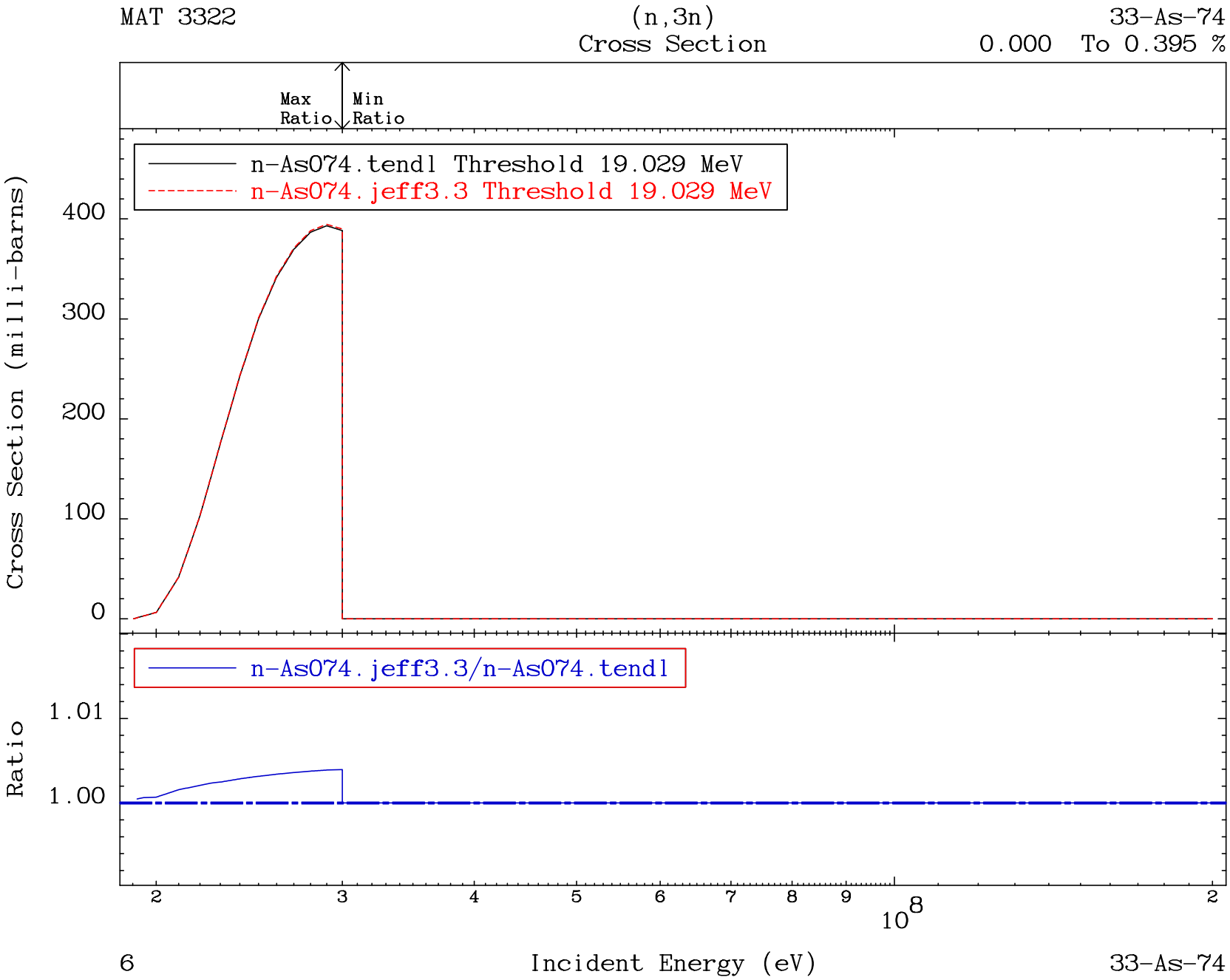

MAT 3322
Total
Cross Section
33-As-74
-89.02 To 9999. %
Max
Ratio
Min
Ratio
n-As074.tendl
n-As074.jeff3.3
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
Incident Energy (eV)
1
33-As-74

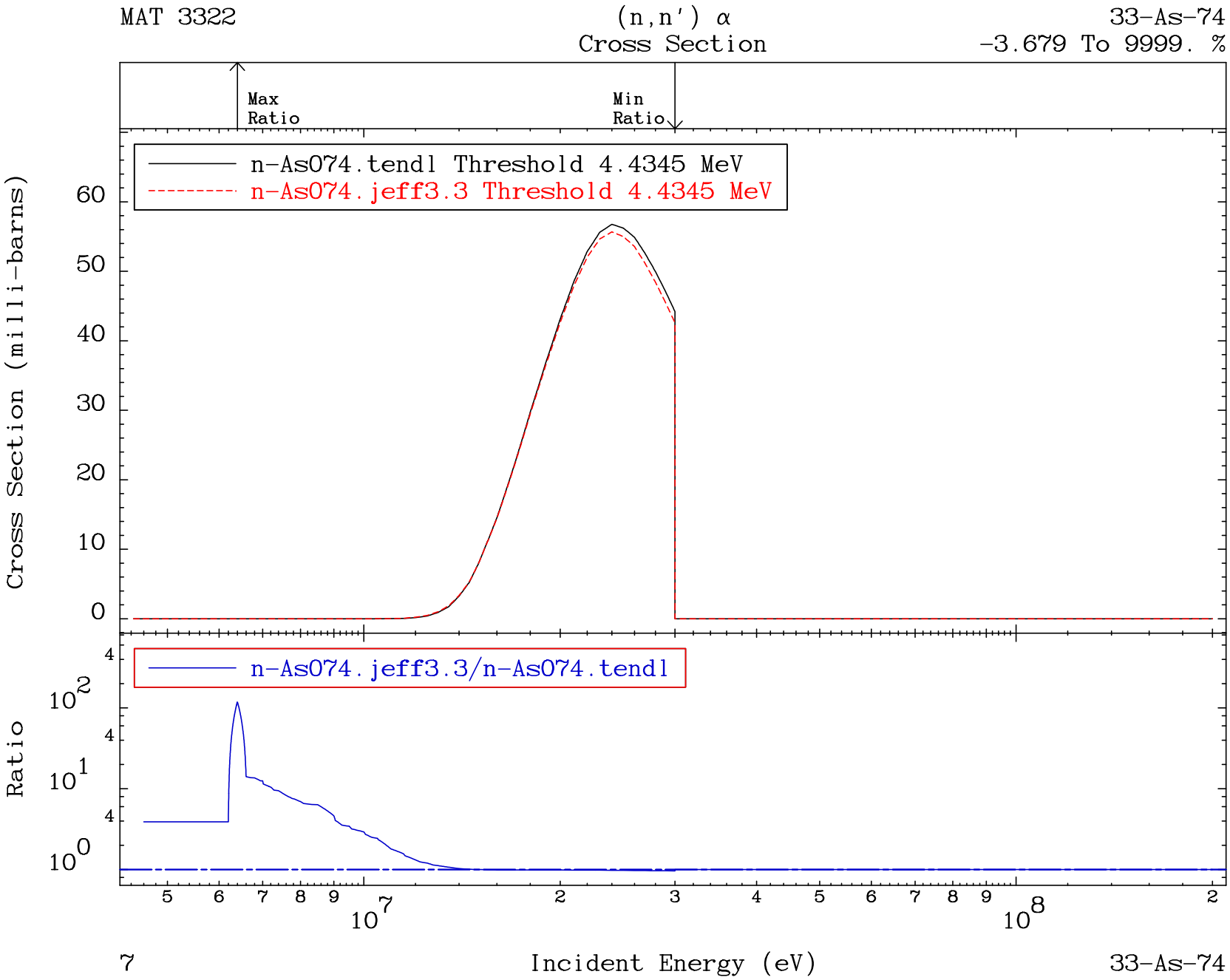

MAT 3322
Elastic
Cross Section
33-As-74
-55.25 To 9999. %
Min Ratio
Max Ratio
n-As074.tendl
n-As074.jeff3.3
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
Incident Energy (eV)
2
33-As-74

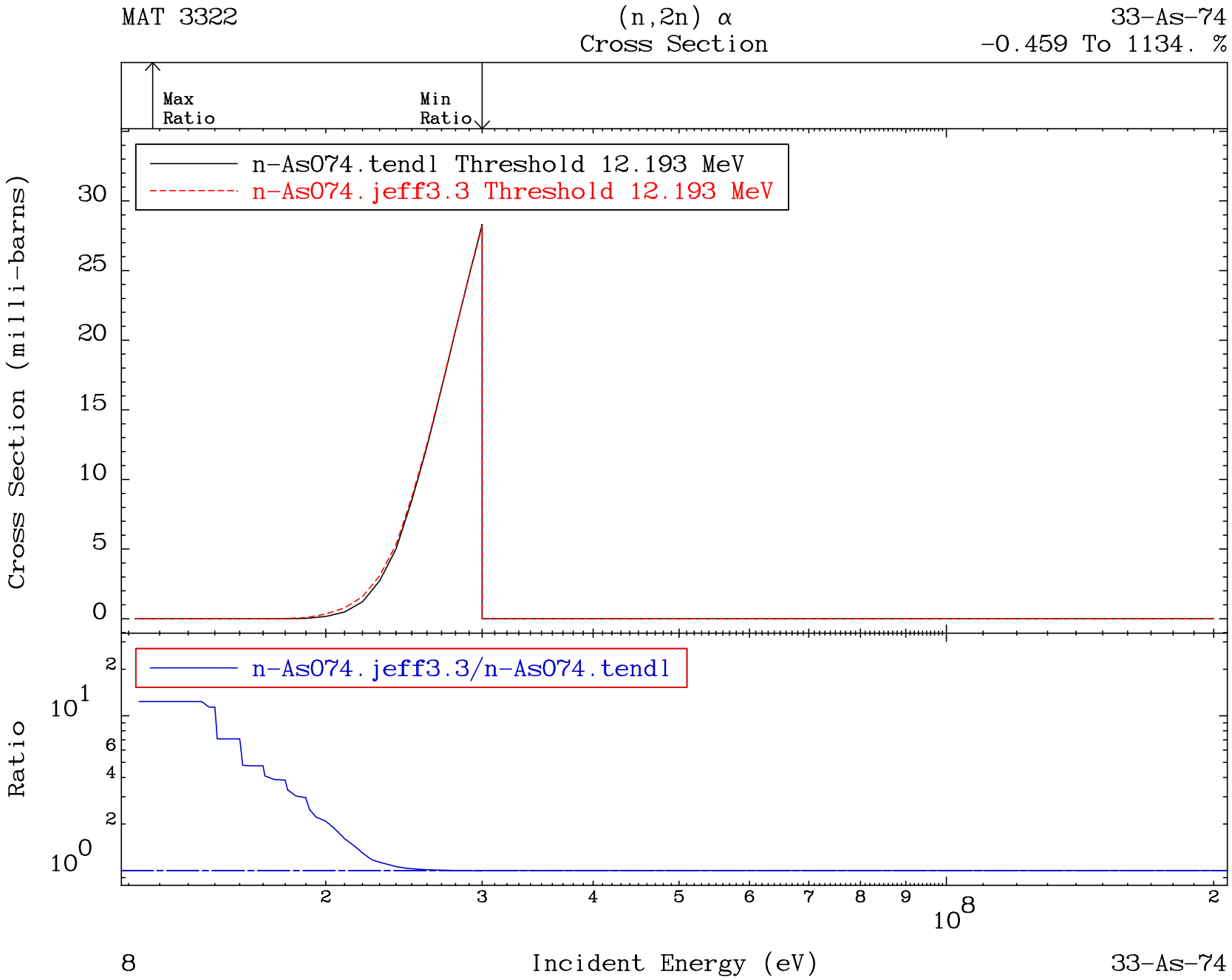

MAT 3322
Inelastic
Cross Section
33-As-74
-0.005 To 0.010 %
Min
Ratio
Max
Ratio
n-As074.tendl Threshold 175.50 keV
n-As074.jeff3.3 Threshold 175.50 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
3
33-As-74

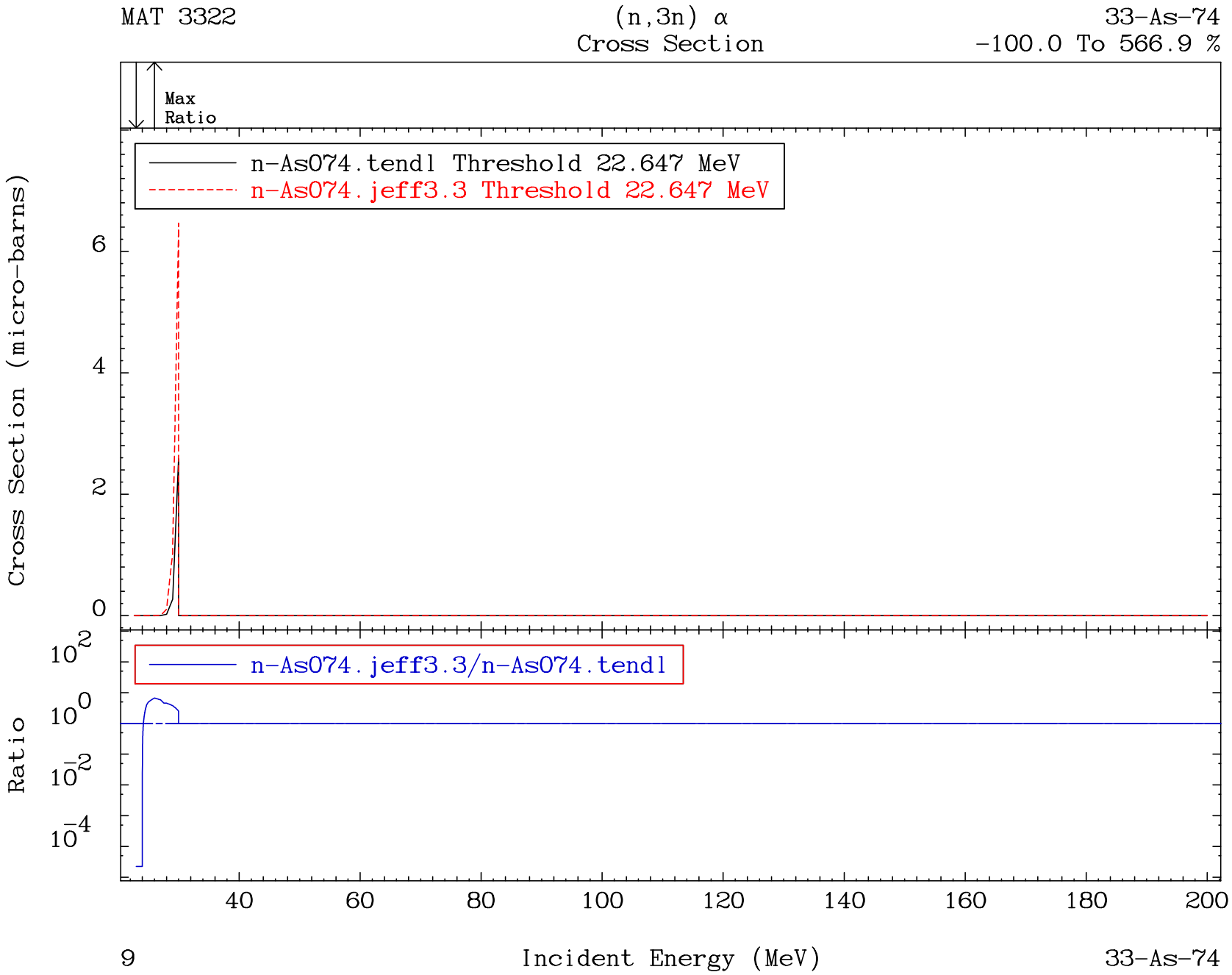

MAT 3322
(n,2n) d
Cross Section
33-As-74
-0.077 To 0.239 %
Max
Ratio
n-As074.tendl Threshold 22.463 MeV
n-As074.jeff3.3 Threshold 22.463 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
33-As-74

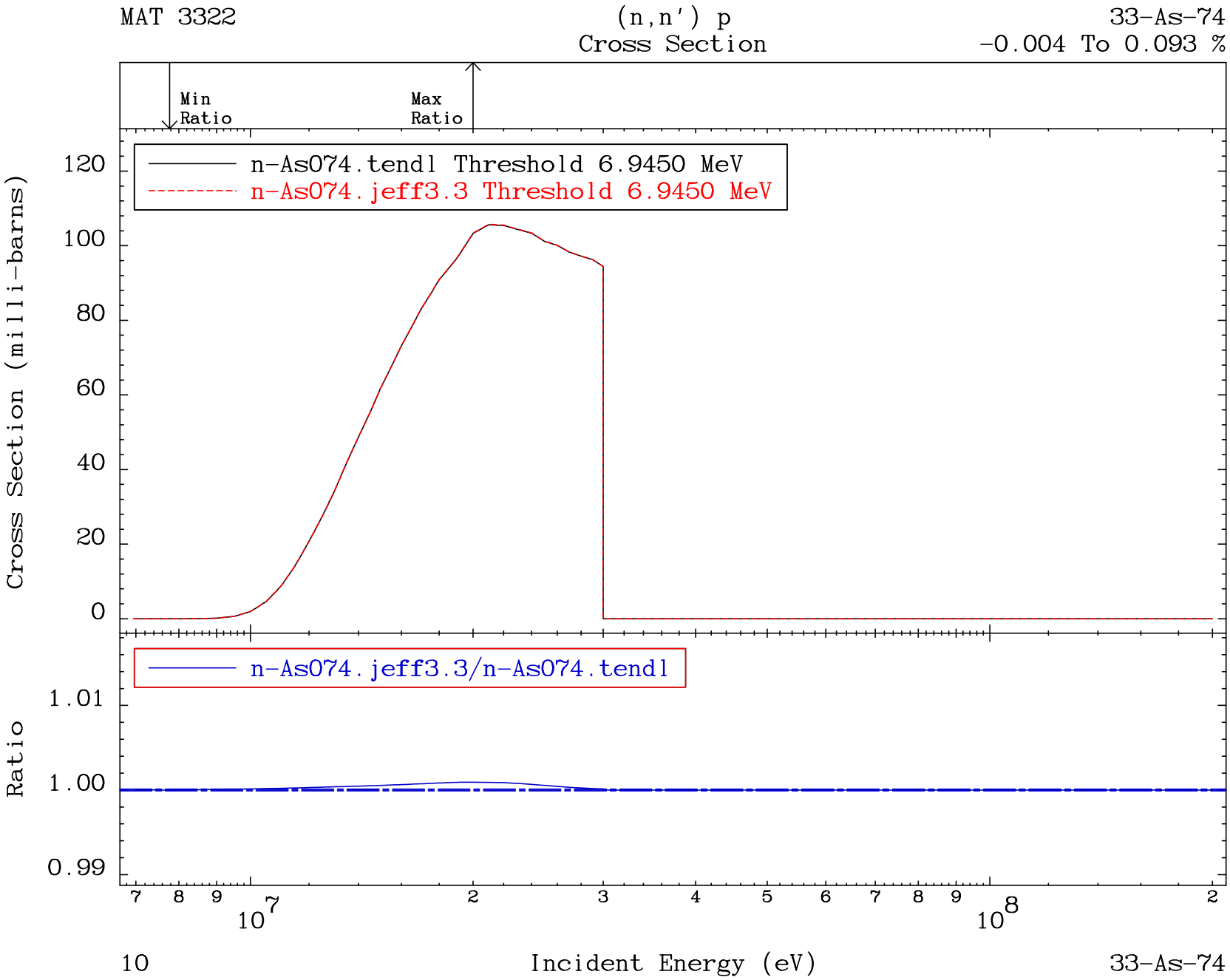

MAT 3322
(n,2n)
Cross Section
33-As-74
0.000 To 0.125 %
Max Ratio
Min Ratio
n-As074.tendl Threshold 8.0875 MeV
n-As074.jeff3.3 Threshold 8.0875 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
5
Incident Energy (eV)
33-As-74

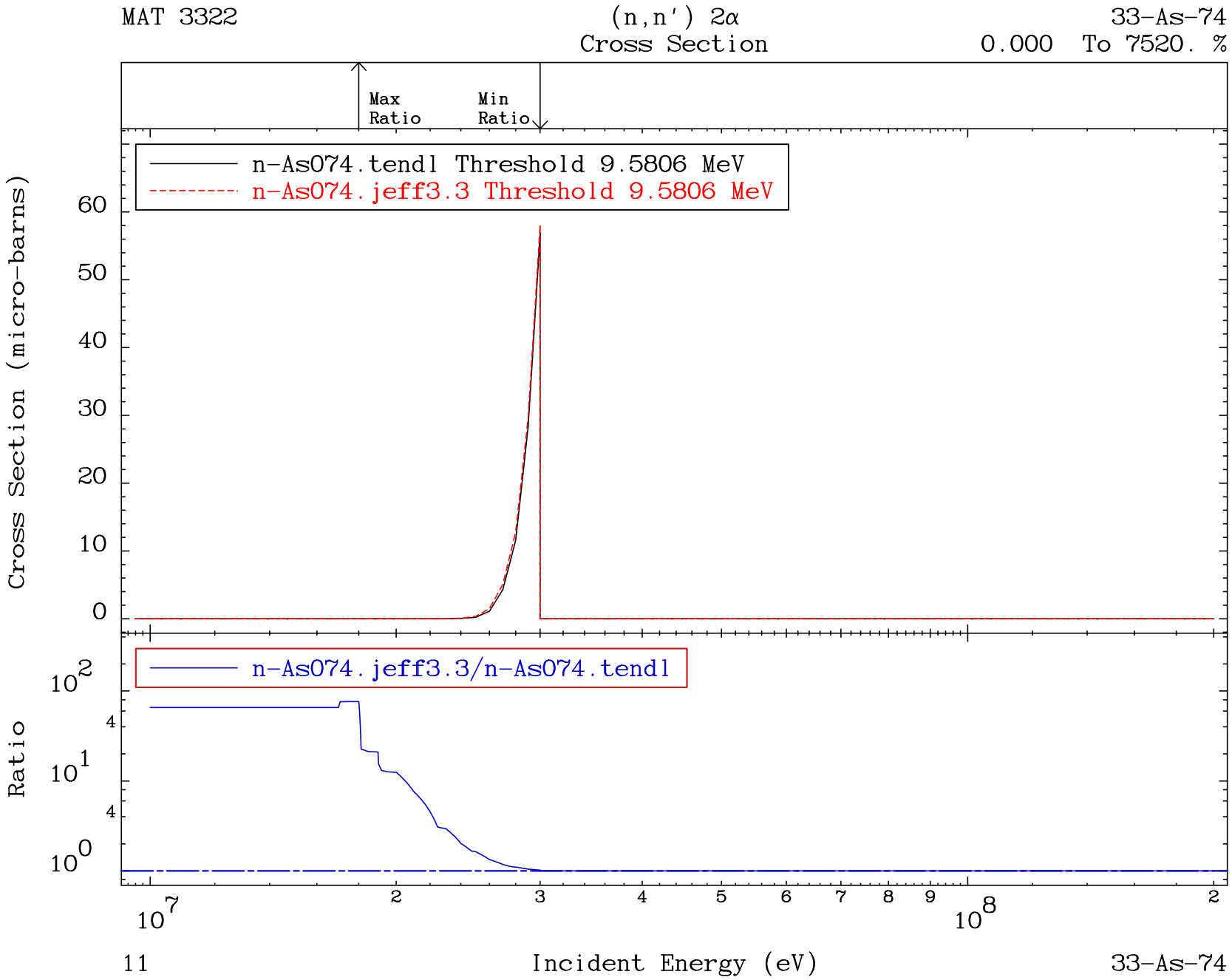

MAT 3322
(n,3n)
Cross Section
33-As-74
0.000 To 0.395 %
Max Ratio
Min Ratio
n-As074.tendl Threshold 19.029 MeV
n-As074.jeff3.3 Threshold 19.029 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
33-As-74

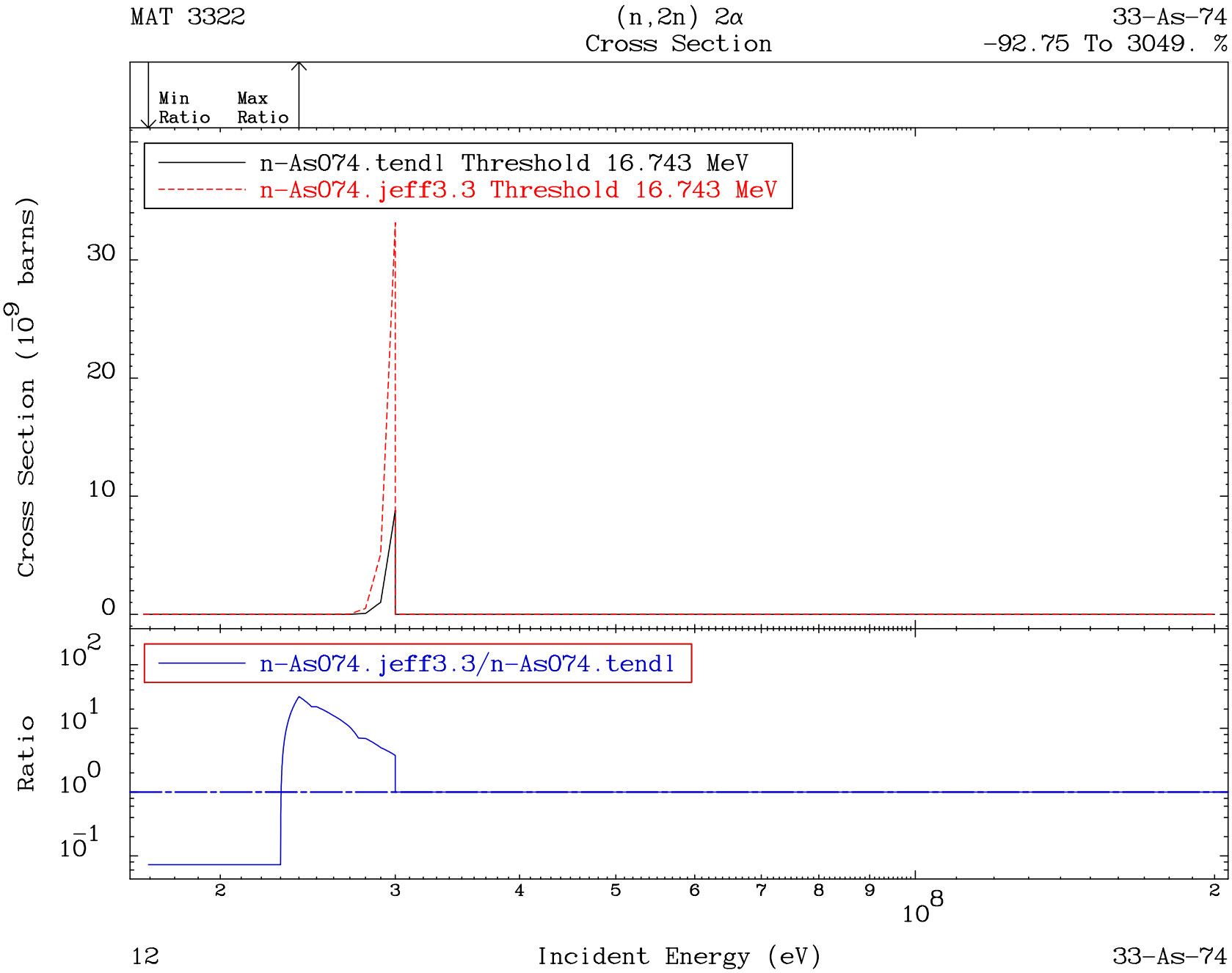

MAT 3322
(n,n') α
Cross Section
33-As-74
-3.679 To 9999. %
Max Ratio
Min Ratio
n-As074.tendl Threshold 4.4345 MeV
n-As074.jeff3.3 Threshold 4.4345 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-As074.jeff3.3/n-As074.tendl
Ratio
10^2
10^1
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
33-As-74

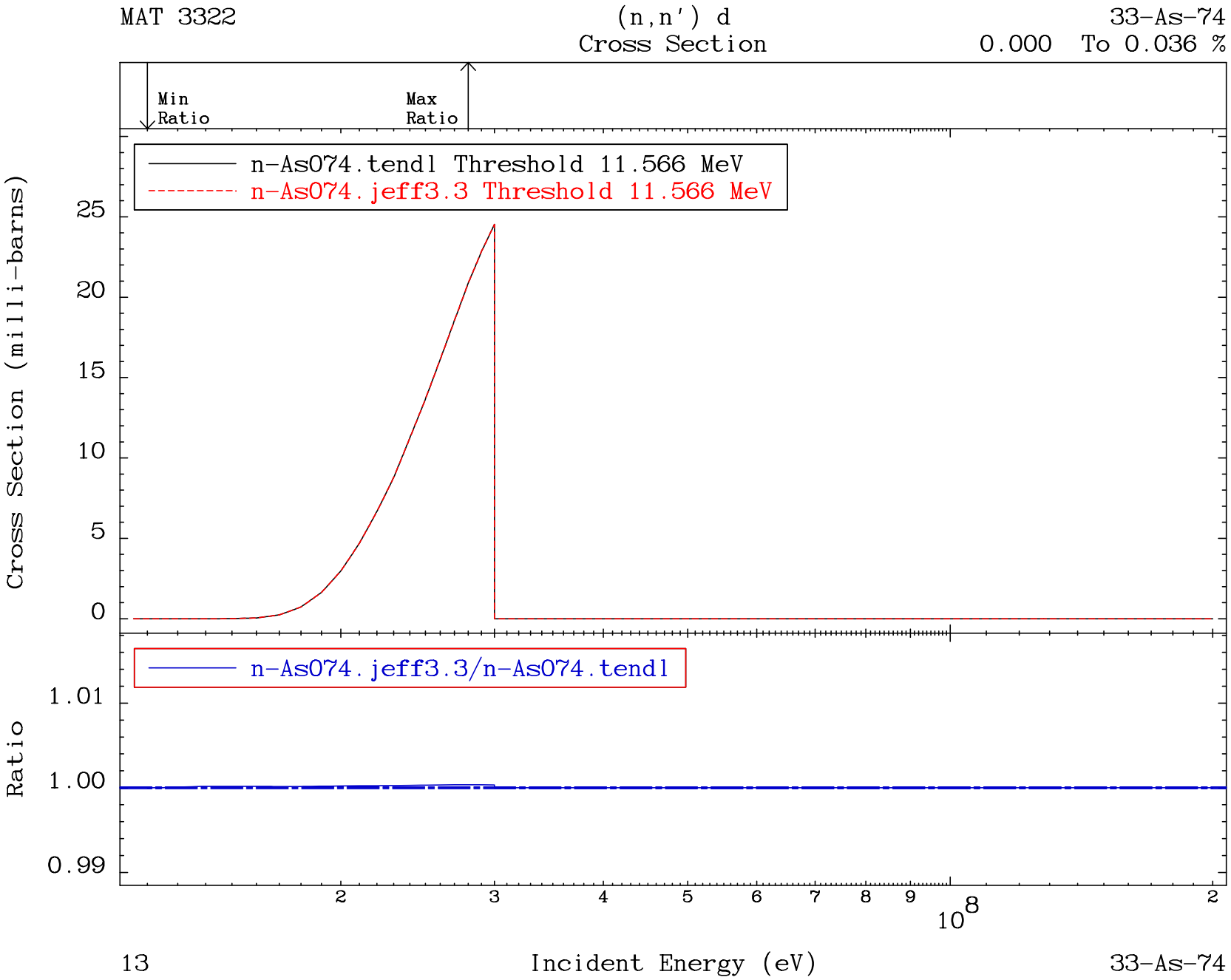

MAT 3322
(n,2n) α
Cross Section
33-As-74
-0.459 To 1134. %
Max Ratio
Min Ratio
n-As074.tendl Threshold 12.193 MeV
n-As074.jeff3.3 Threshold 12.193 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-As074.jeff3.3/n-As074.tendl
Ratio
2
10^1
6
4
2
10^0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
33-As-74

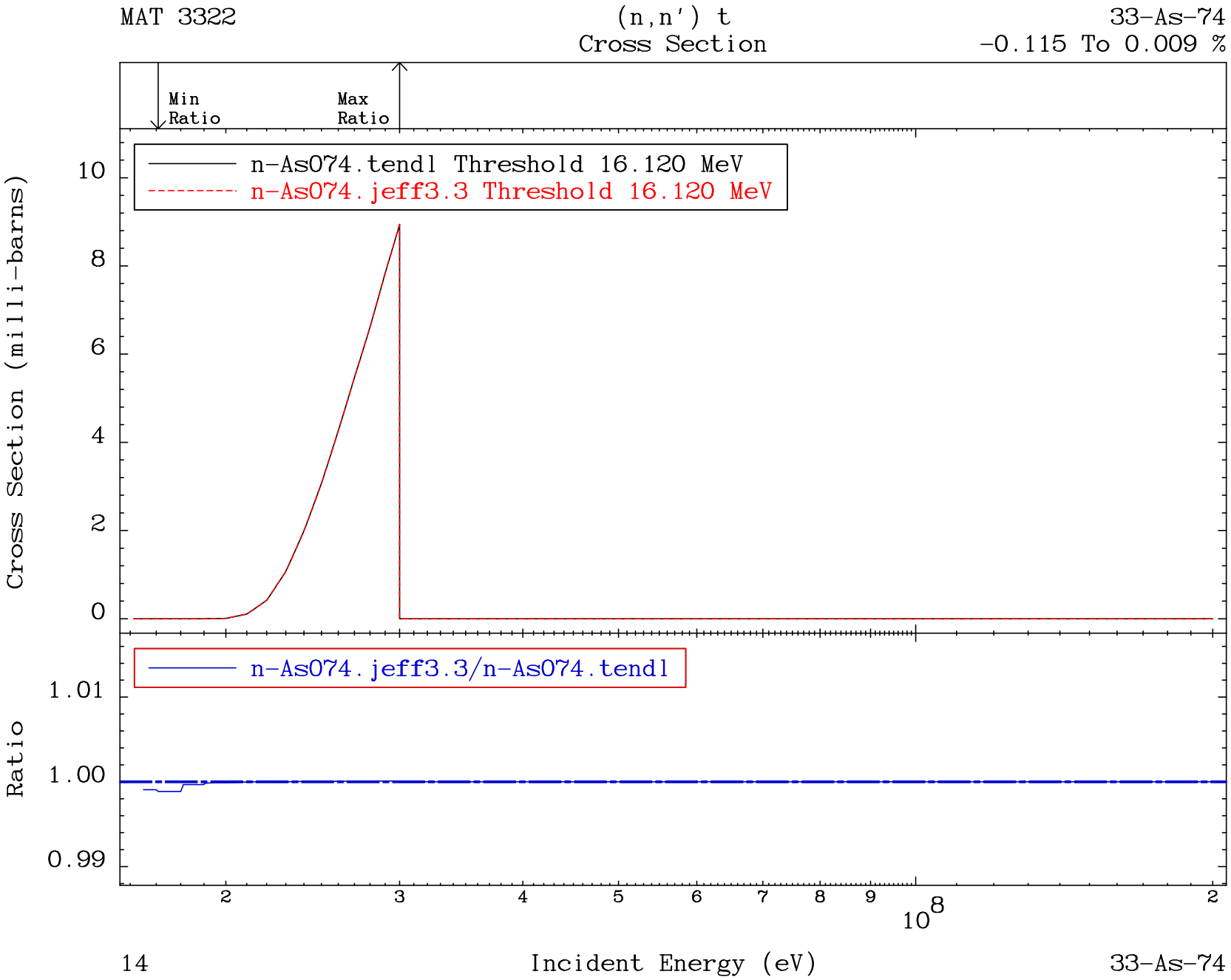

MAT 3322
(n,3n) α
Cross Section
33-As-74
-100.0 To 566.9 %
Max
Ratio
n-As074.tendl Threshold 22.647 MeV
n-As074.jeff3.3 Threshold 22.647 MeV
Cross Section (micro-barns)
0
2
4
6
n-As074.jeff3.3/n-As074.tendl
Ratio
10^2
10^0
10^-2
10^-4
40
60
80
100
120
140
160
180
200
9
Incident Energy (MeV)
33-As-74

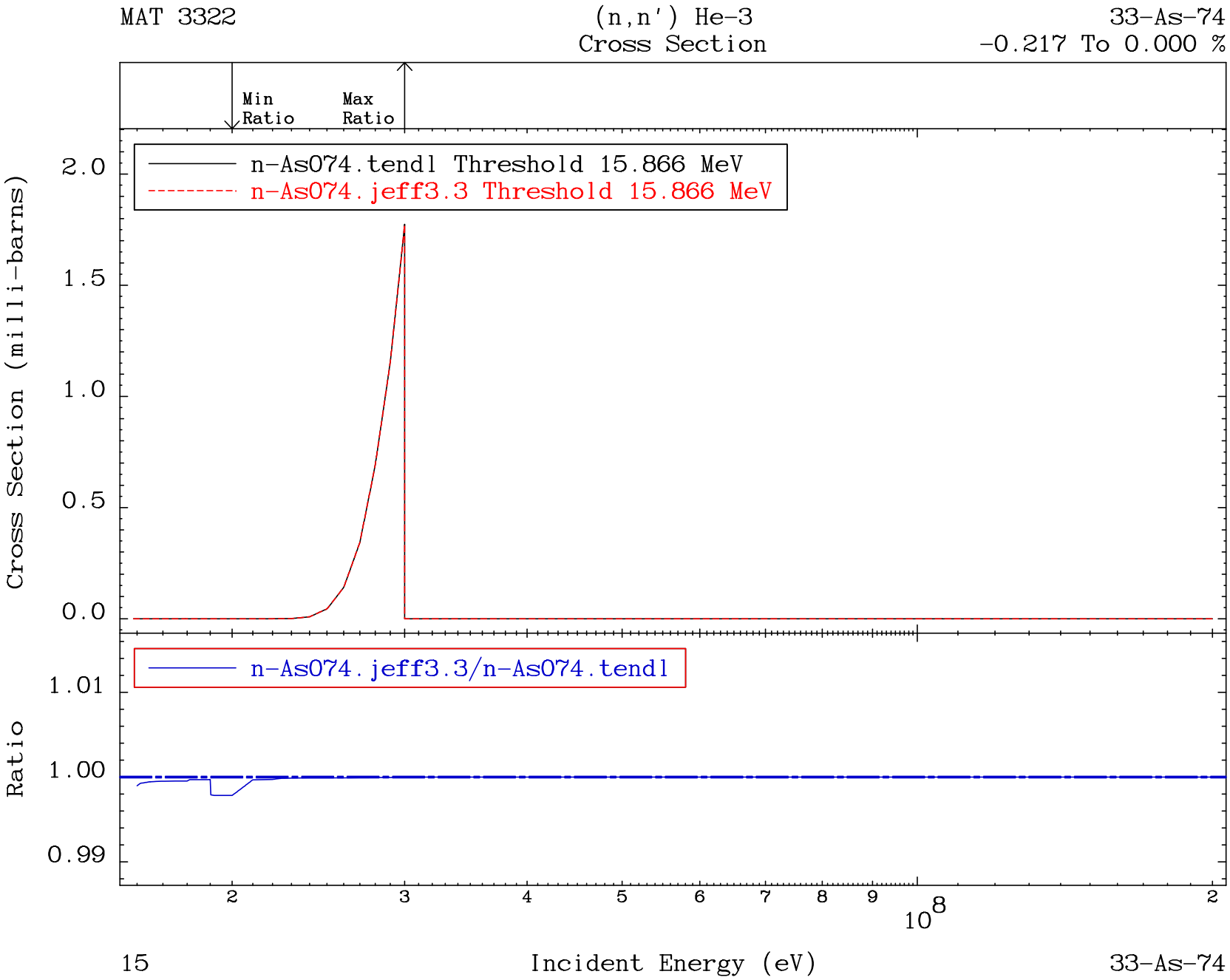

MAT 3322
(n,n') p
Cross Section
33-As-74
-0.004 To 0.093 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 6.9450 MeV
n-As074.jeff3.3 Threshold 6.9450 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
10
Incident Energy (eV)
33-As-74

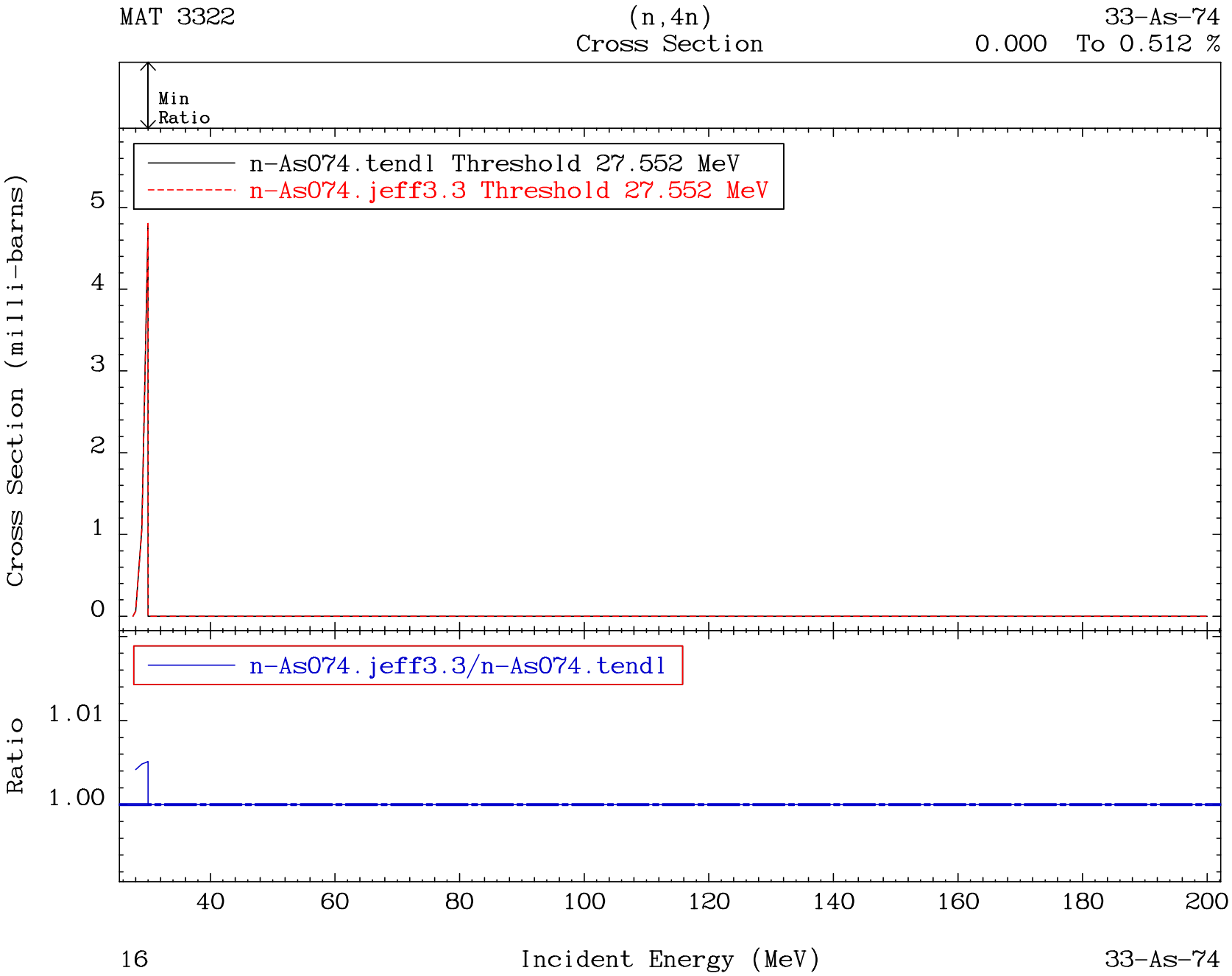

MAT 3322
(n,n') 2α
Cross Section
33-As-74
0.000 To 7520. %
Max Ratio
Min Ratio
n-As074.tendl Threshold 9.5806 MeV
n-As074.jeff3.3 Threshold 9.5806 MeV
Cross Section (micro-barns)
60
50
40
30
20
10
0
n-As074.jeff3.3/n-As074.tendl
Ratio
10^2
10^1
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
33-As-74

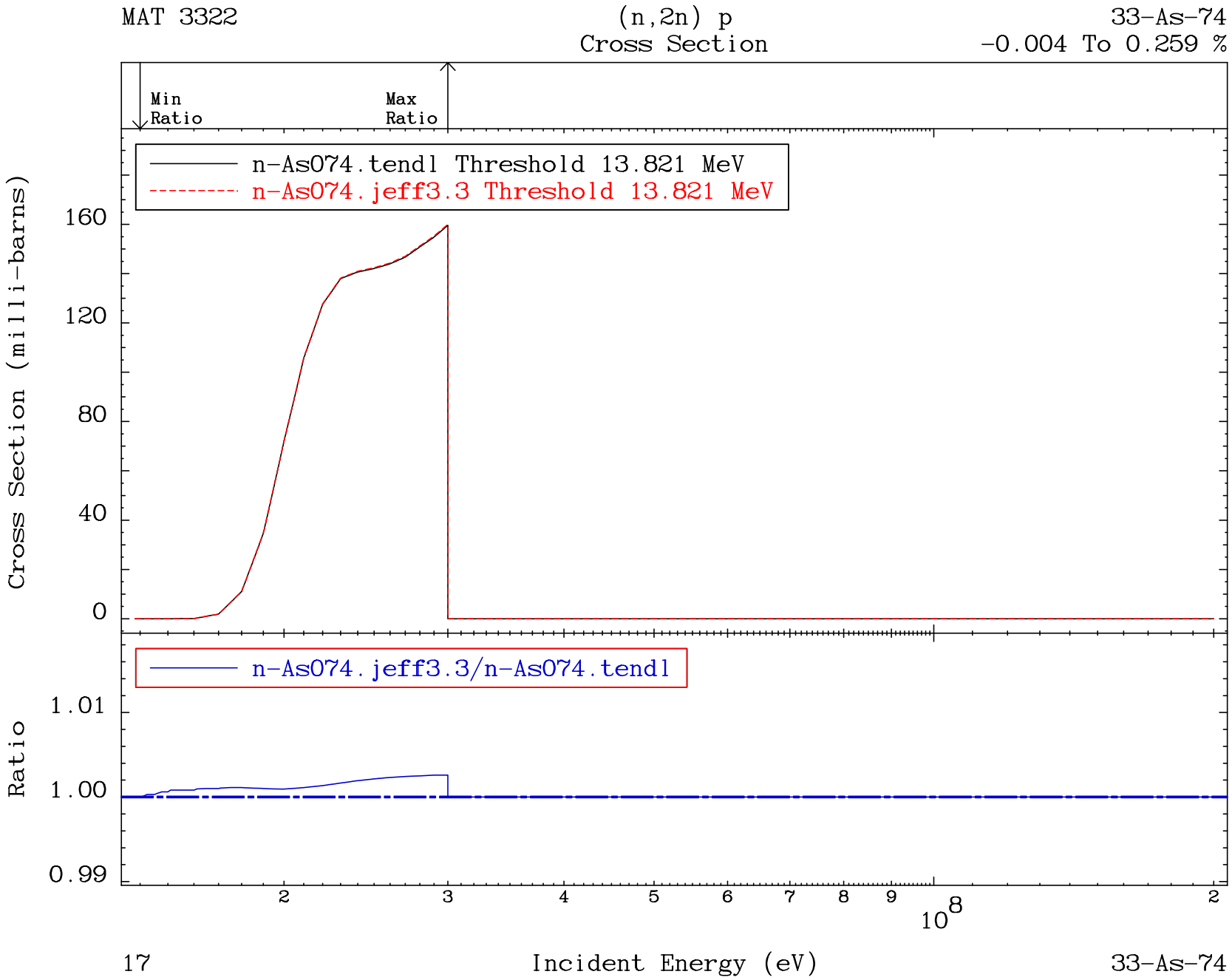

MAT 3322
(n,2n) 2α
Cross Section
33-As-74
-92.75 To 3049. %
Min Ratio
Max Ratio
n-As074.tendl Threshold 16.743 MeV
n-As074.jeff3.3 Threshold 16.743 MeV
Cross Section (10^-9 barns)
30
20
10
0
n-As074.jeff3.3/n-As074.tendl
Ratio
10^2
10^1
10^0
10^-1
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
33-As-74

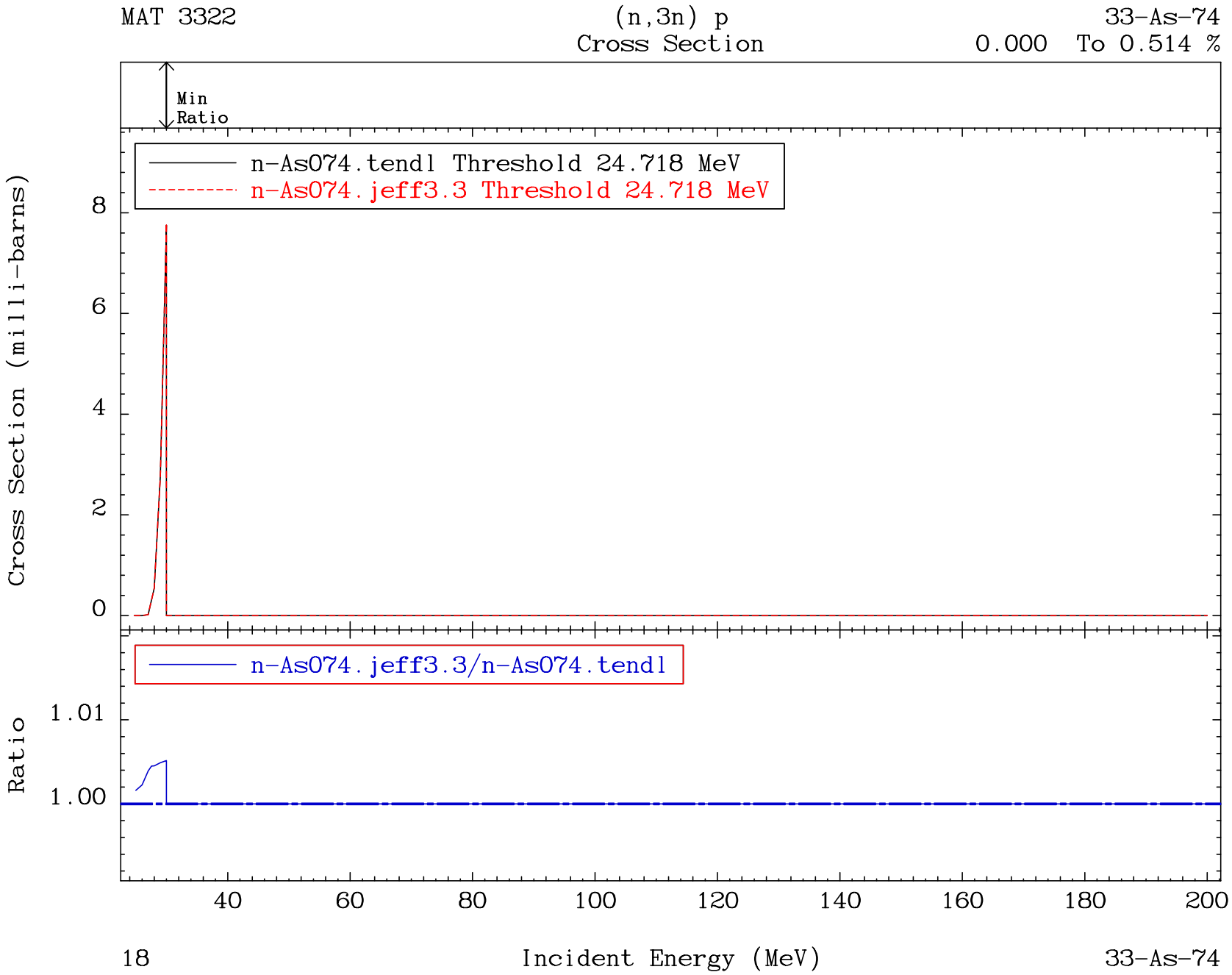

MAT 3322
(n,n') d
Cross Section
33-As-74
0.000 To 0.036 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 11.566 MeV
n-As074.jeff3.3 Threshold 11.566 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
33-As-74

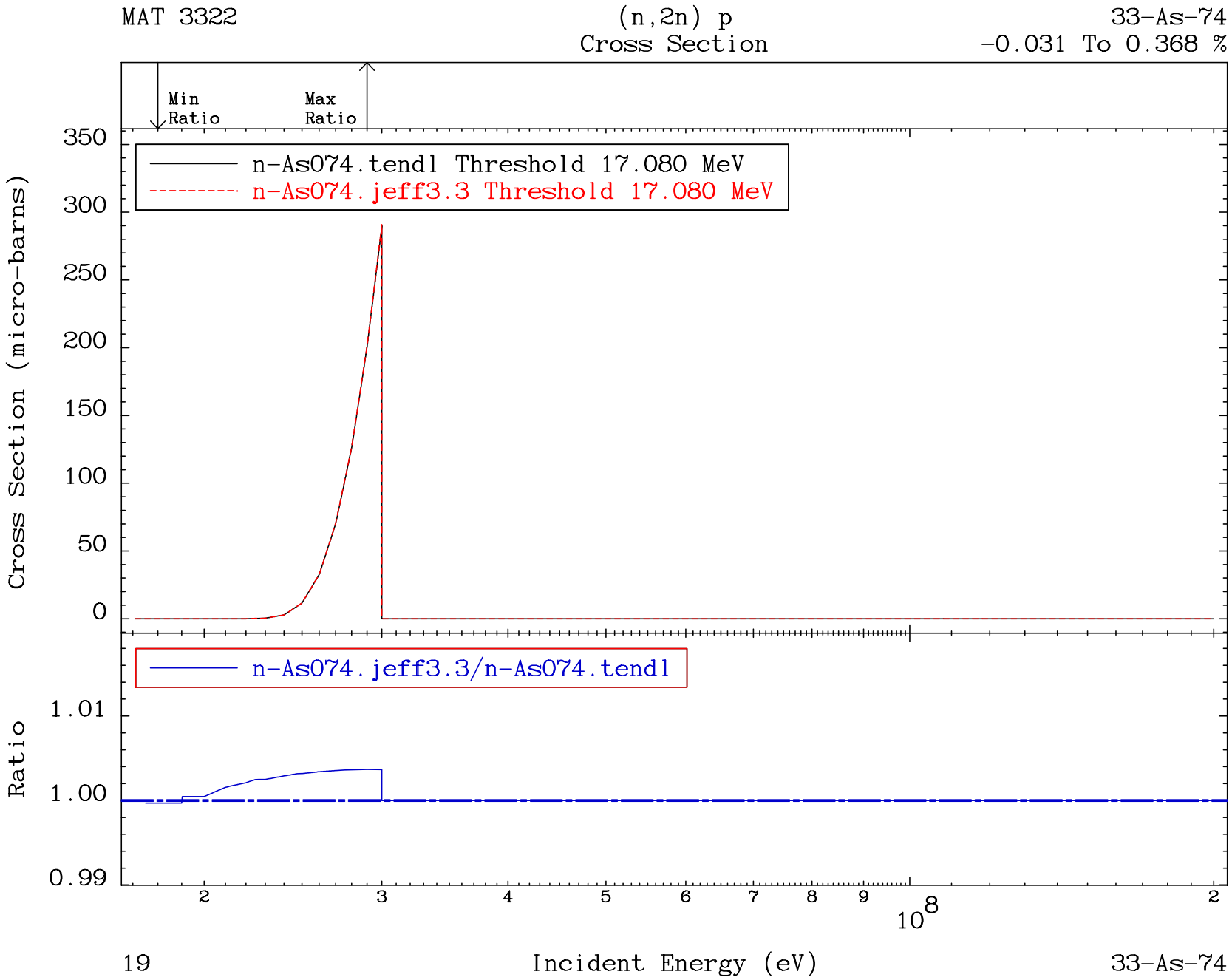

MAT 3322
(n,n') t
Cross Section
33-As-74
-0.115 To 0.009 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 16.120 MeV
n-As074.jeff3.3 Threshold 16.120 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
33-As-74

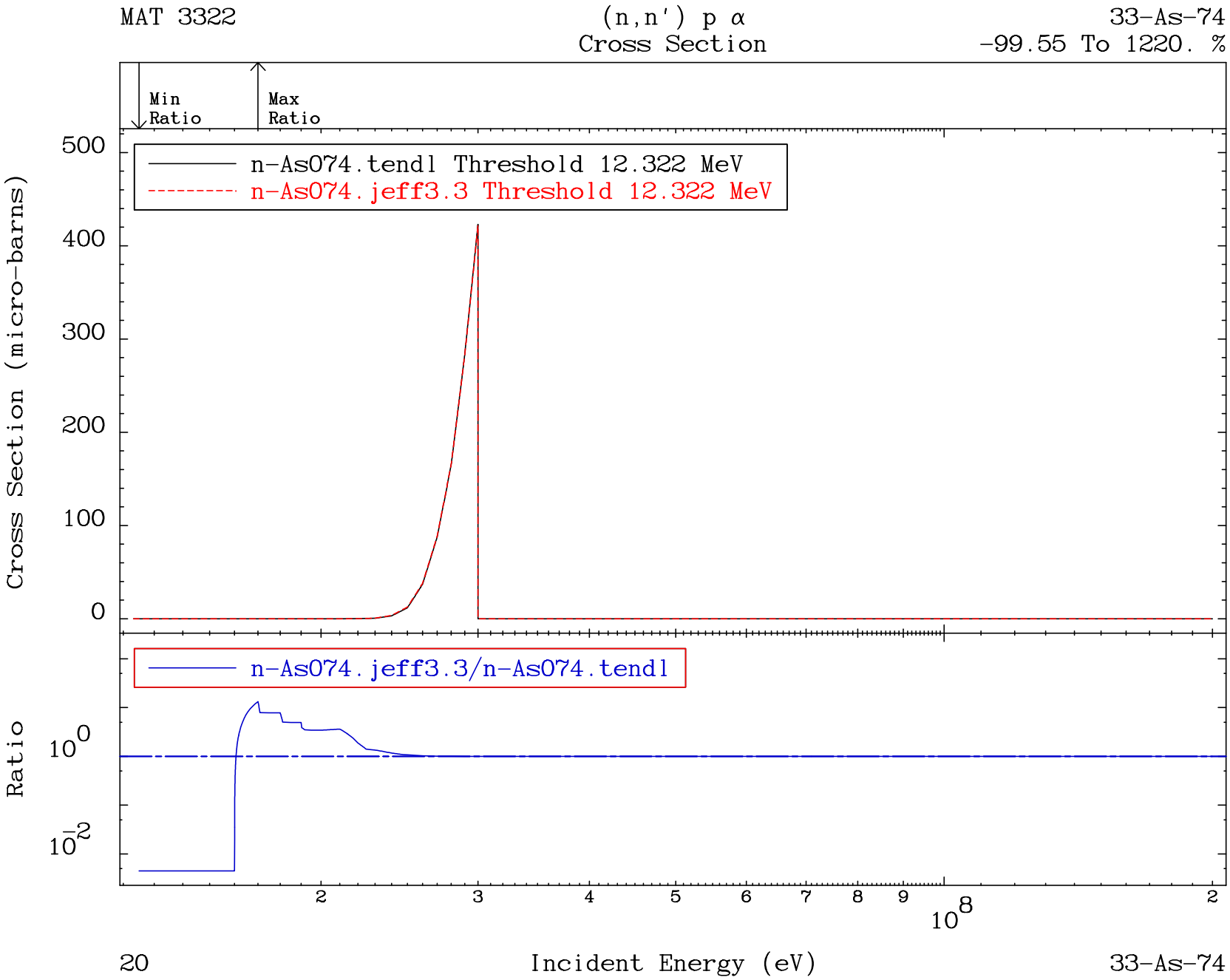

MAT 3322
(n,n') He-3
Cross Section
33-As-74
-0.217 To 0.000 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 15.866 MeV
n-As074.jeff3.3 Threshold 15.866 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
15
Incident Energy (eV)
33-As-74

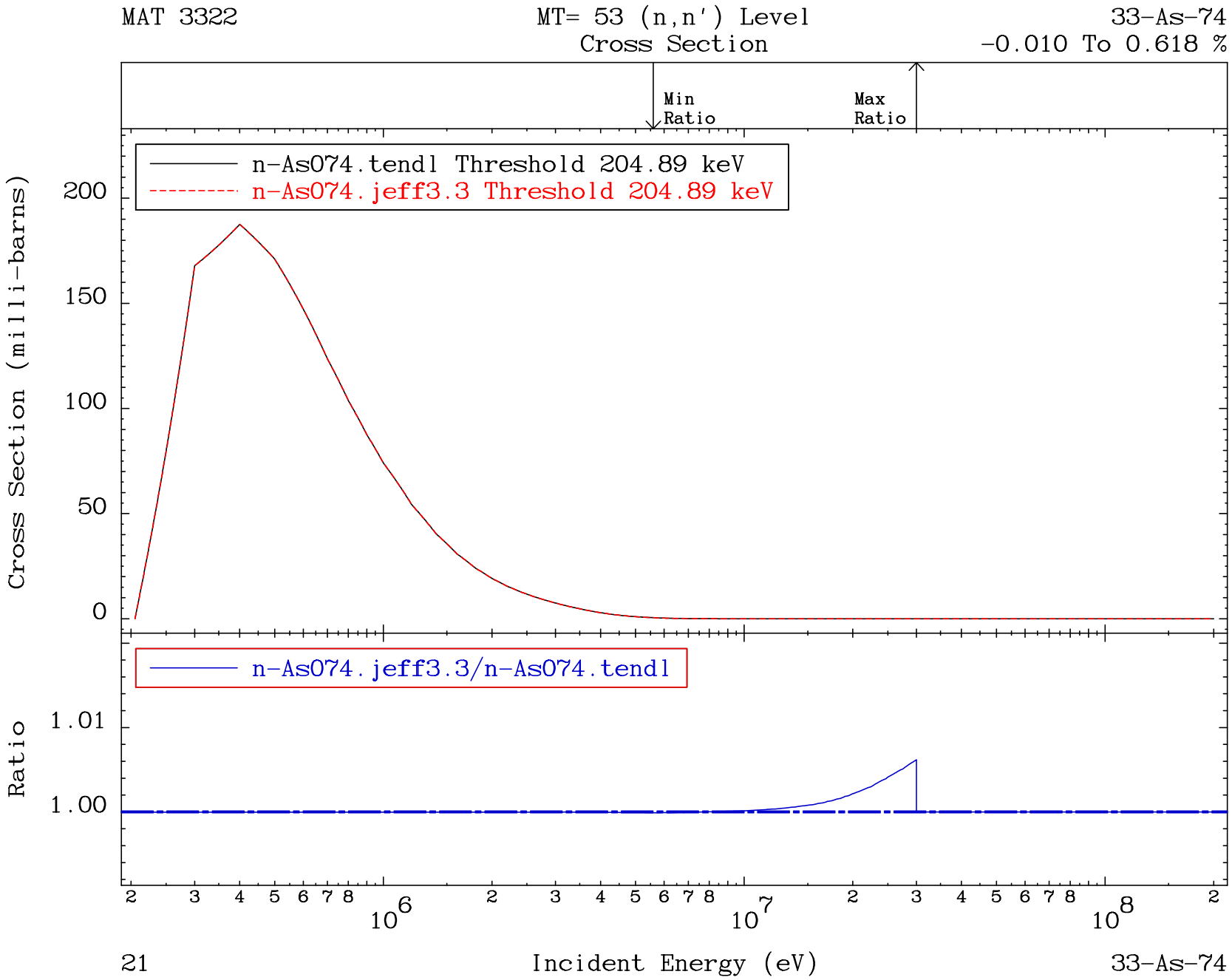

MAT 3322
(n,4n)
Cross Section
33-As-74
0.000 To 0.512 %
Min
Ratio
n-As074.tendl Threshold 27.552 MeV
n-As074.jeff3.3 Threshold 27.552 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-As074.jeff3.3/n-As074.tendl
Ratio
1.00
1.01
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
33-As-74

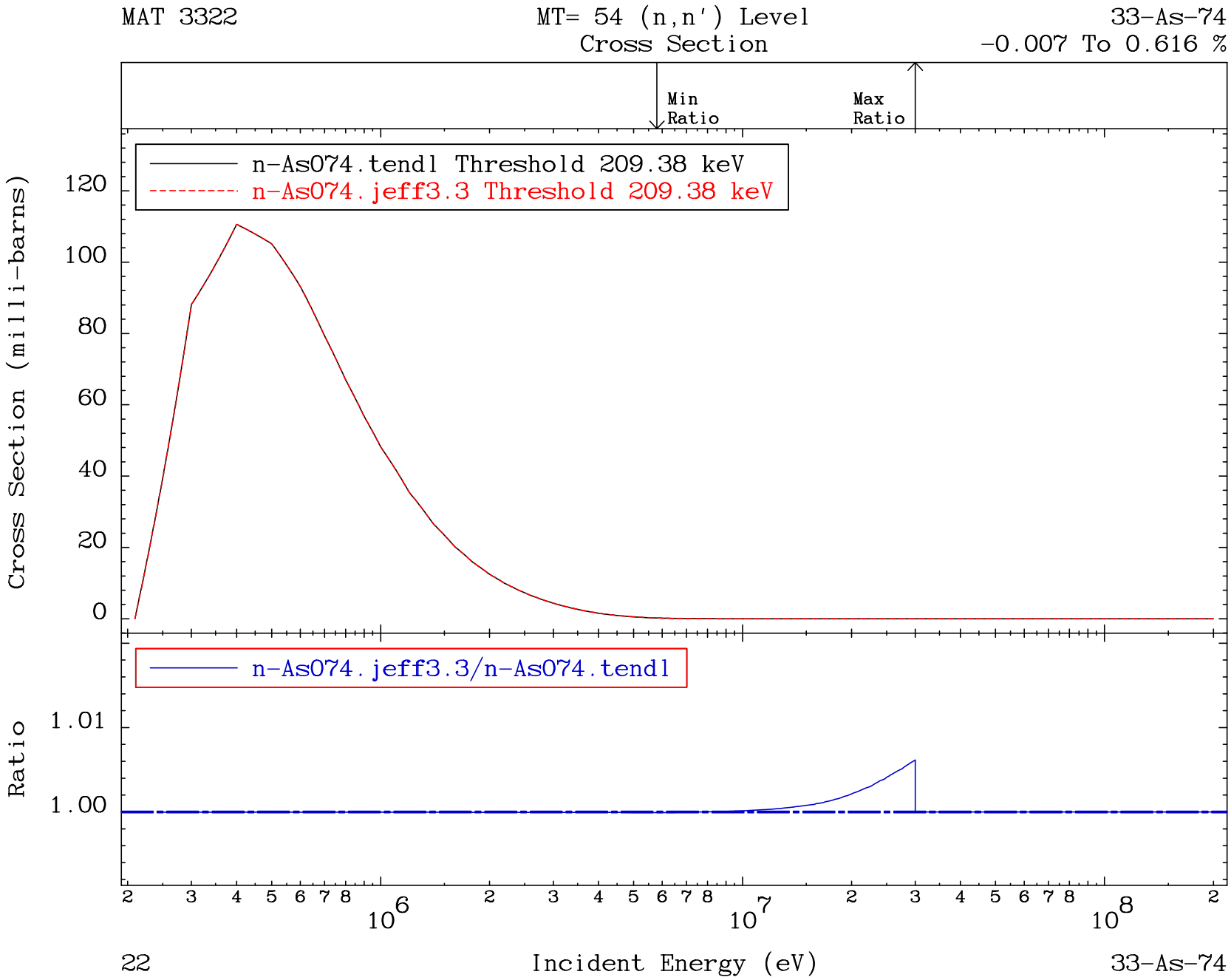

MAT 3322
(n,2n) p
Cross Section
33-As-74
-0.004 To 0.259 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 13.821 MeV
n-As074.jeff3.3 Threshold 13.821 MeV
Cross Section (milli-barns)
160
120
80
40
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
17
Incident Energy (eV)
33-As-74

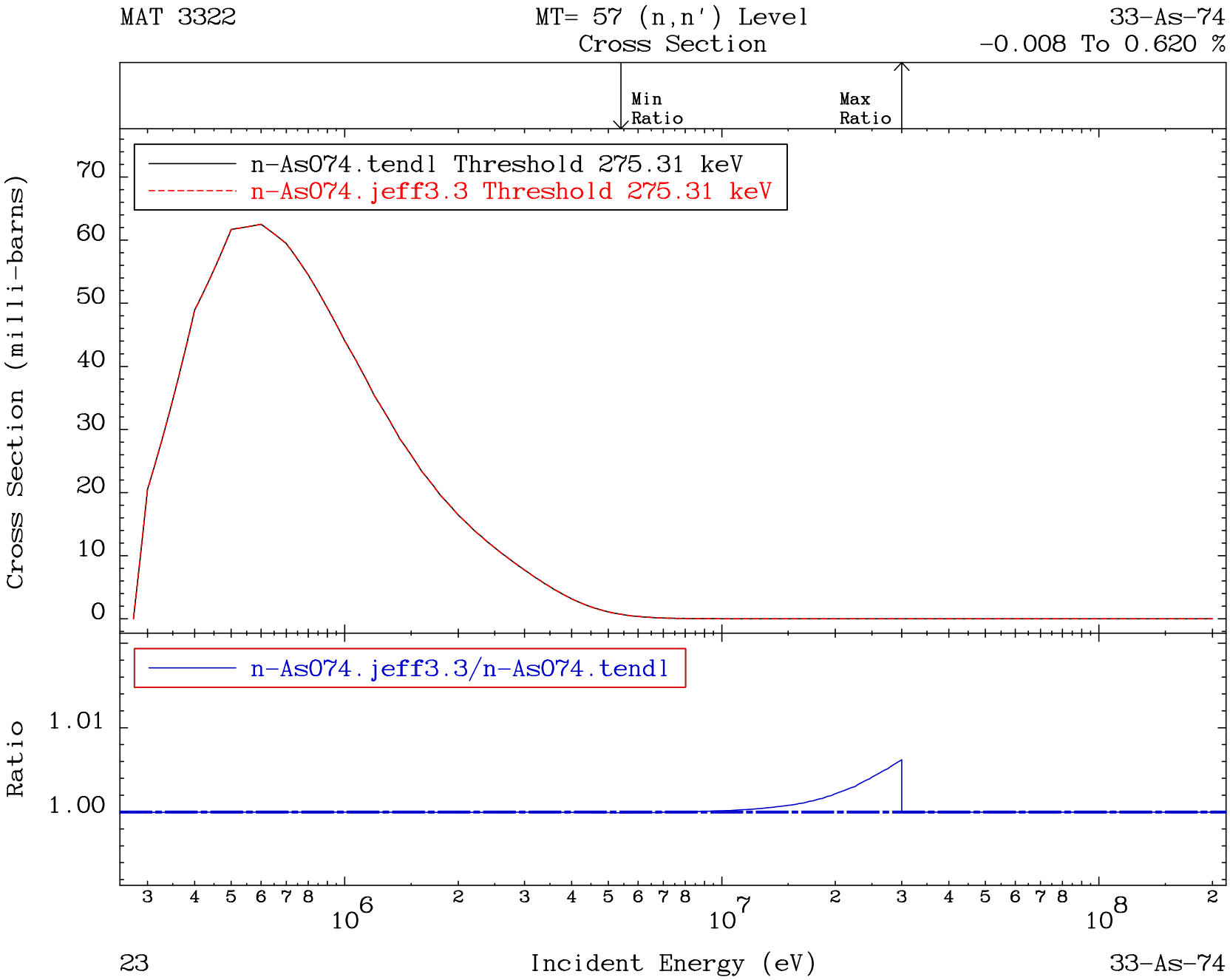

MAT 3322
(n,3n) p
Cross Section
33-As-74
0.000 To 0.514 %
Min
Ratio
n-As074.tendl Threshold 24.718 MeV
n-As074.jeff3.3 Threshold 24.718 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-As074.jeff3.3/n-As074.tendl
Ratio
1.00
1.01
40
60
80
100
120
140
160
180
200
18
Incident Energy (MeV)
33-As-74

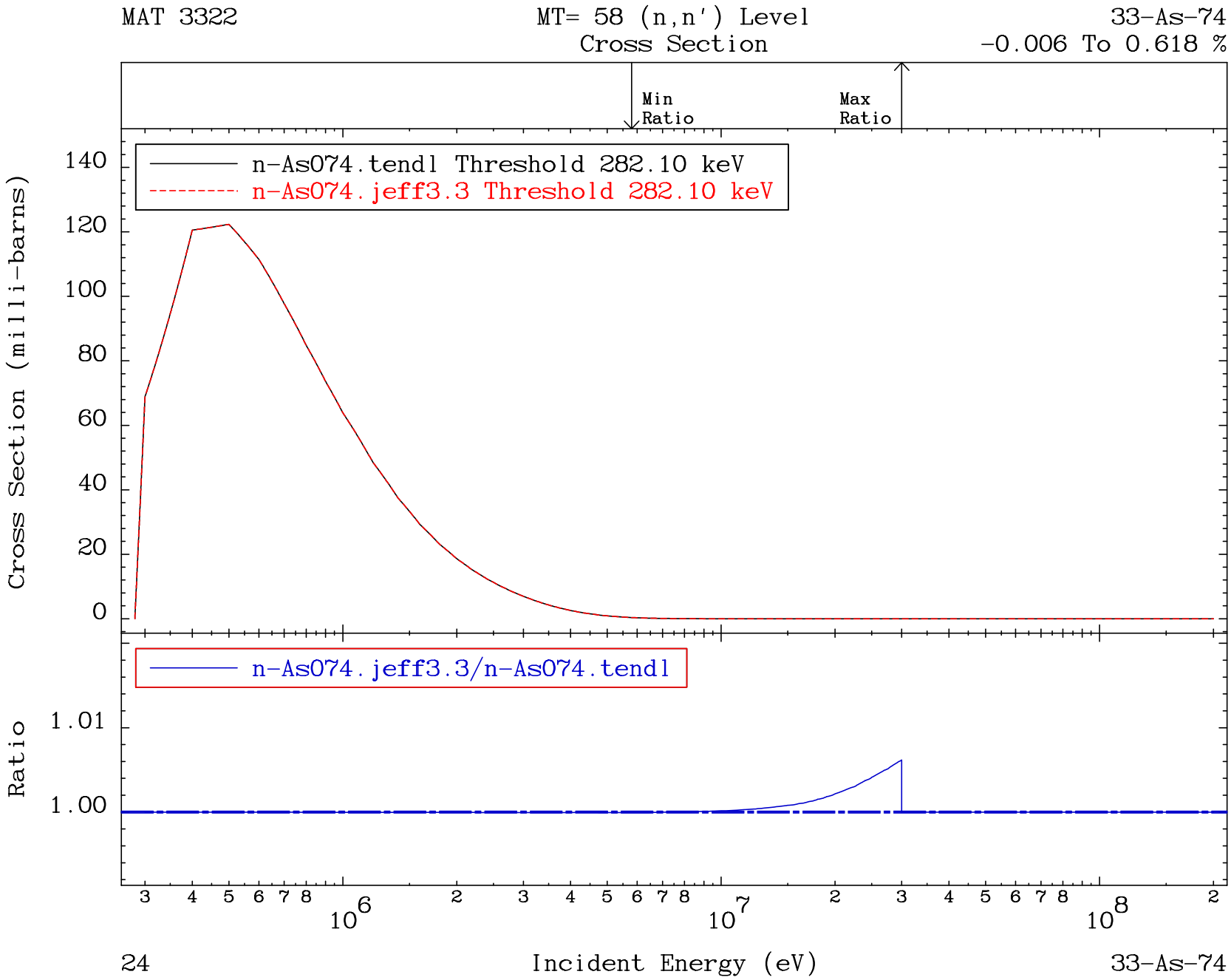

MAT 3322
(n,2n) p
Cross Section
33-As-74
-0.031 To 0.368 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 17.080 MeV
n-As074.jeff3.3 Threshold 17.080 MeV
Cross Section (micro-barns)
350
300
250
200
150
100
50
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
19
Incident Energy (eV)
33-As-74

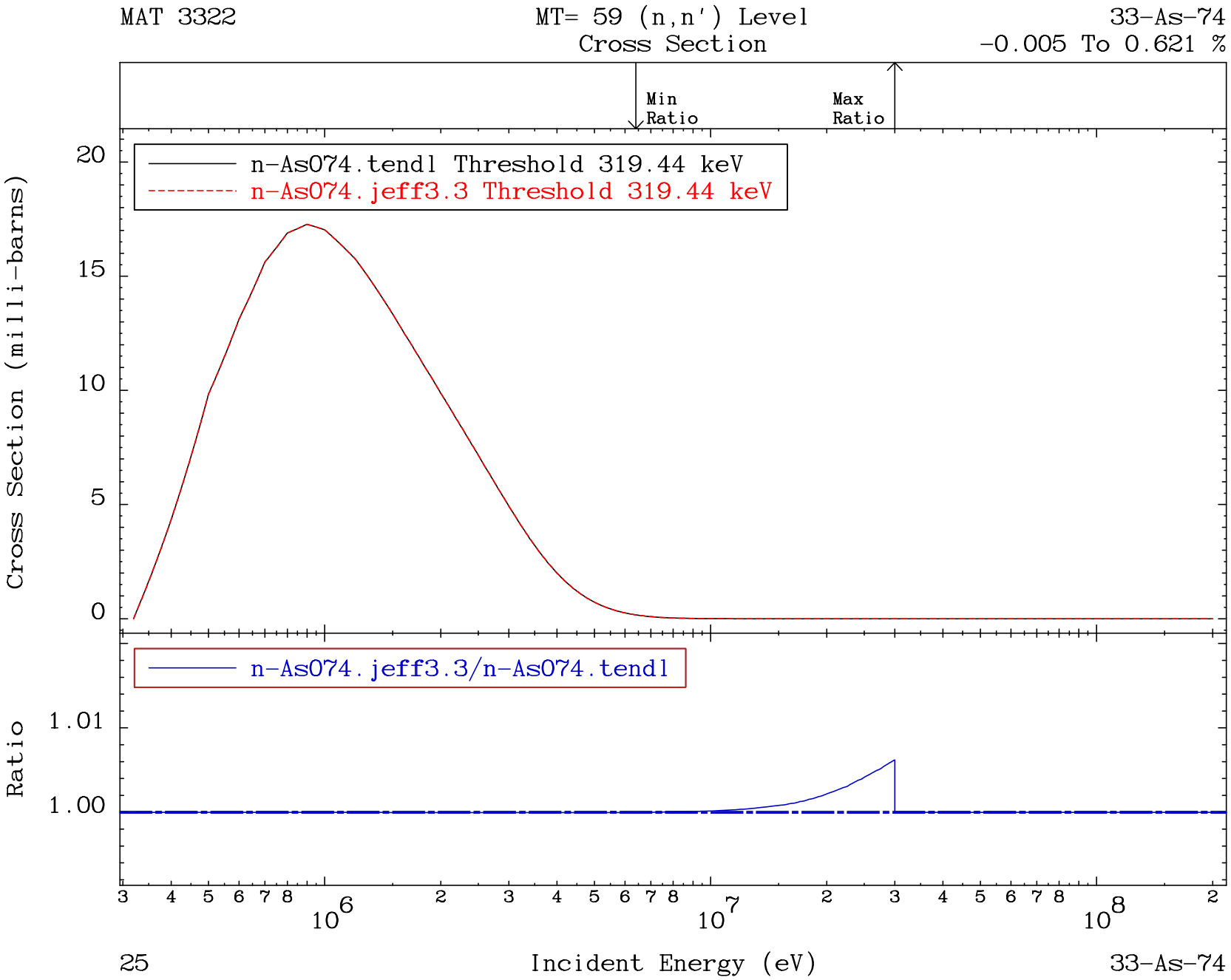

MAT 3322
(n,n') p α
Cross Section
33-As-74
-99.55 To 1220. %
Min Ratio
Max Ratio
n-As074.tendl Threshold 12.322 MeV
n-As074.jeff3.3 Threshold 12.322 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
n-As074.jeff3.3/n-As074.tendl
Ratio
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
20
Incident Energy (eV)
33-As-74

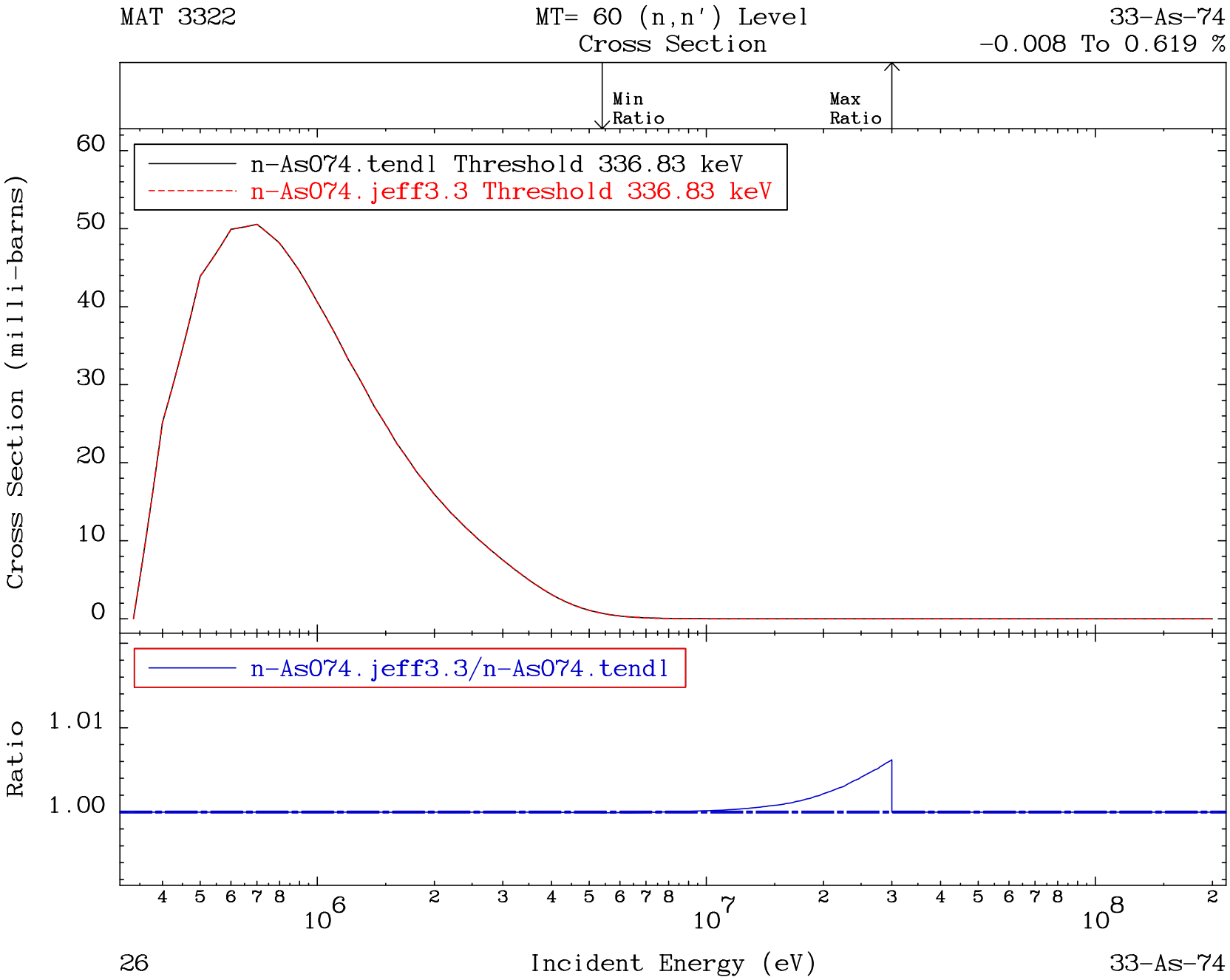

MAT 3322
MT= 53 (n,n') Level
Cross Section
33-As-74
-0.010 To 0.618 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 204.89 keV
n-As074.jeff3.3 Threshold 204.89 keV
Cross Section (milli-barns)
200
150
100
50
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
2 3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
33-As-74

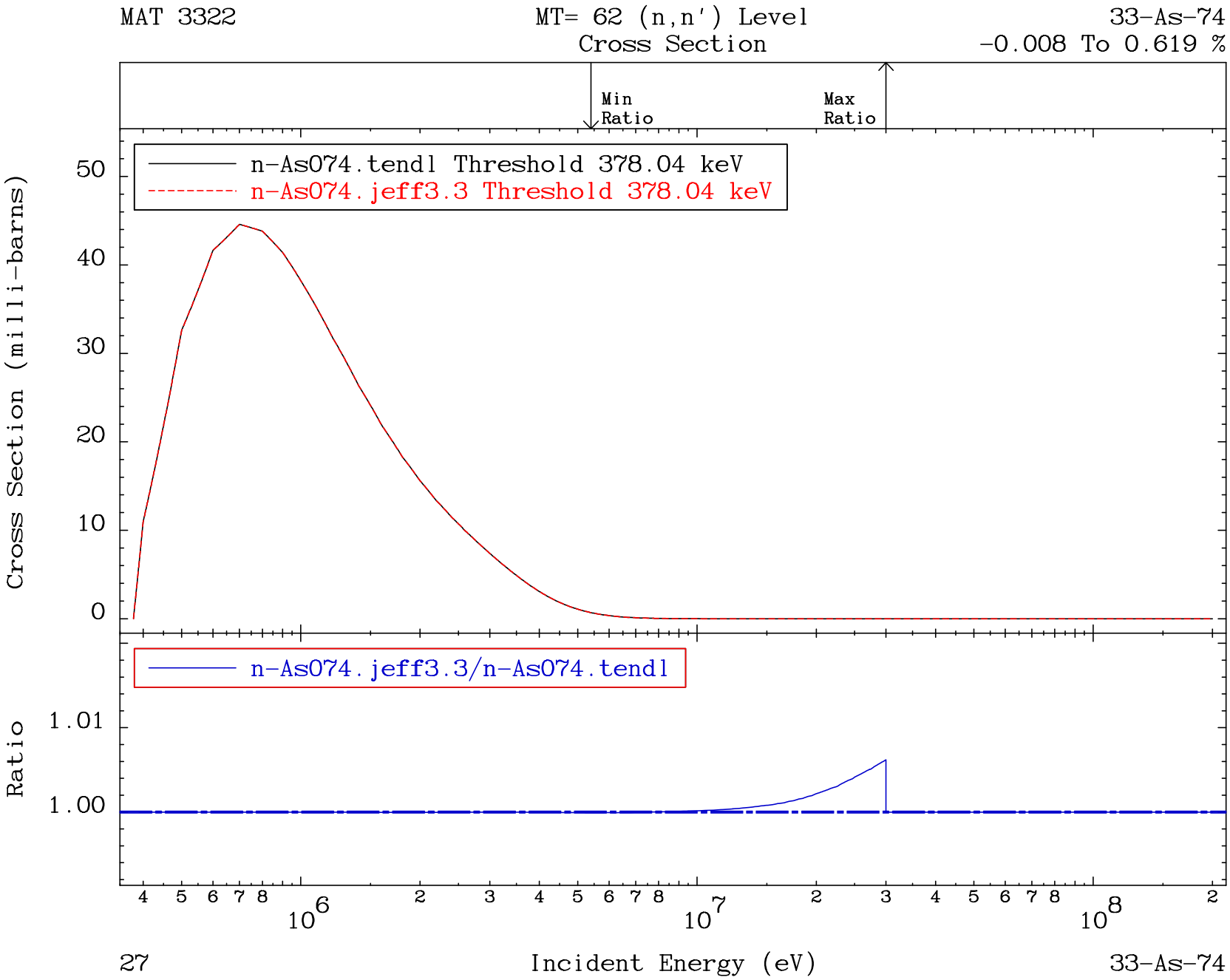

MAT 3322
MT= 54 (n,n') Level
Cross Section
33-As-74
-0.007 To 0.616 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 209.38 keV
n-As074.jeff3.3 Threshold 209.38 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
2 3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
33-As-74

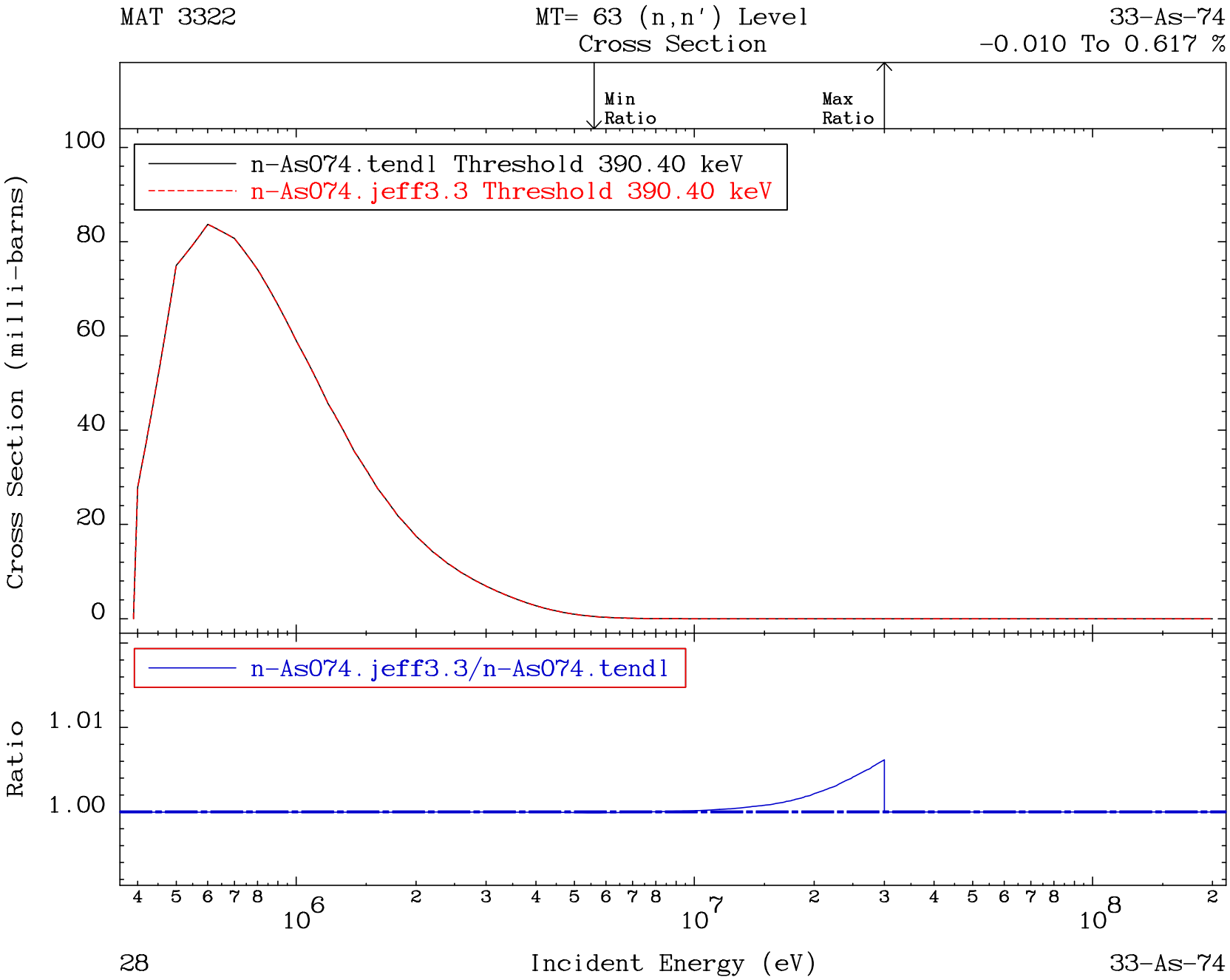

MAT 3322
MT= 57 (n,n') Level
Cross Section
33-As-74
-0.008 To 0.620 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 275.31 keV
n-As074.jeff3.3 Threshold 275.31 keV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
23
Incident Energy (eV)
33-As-74

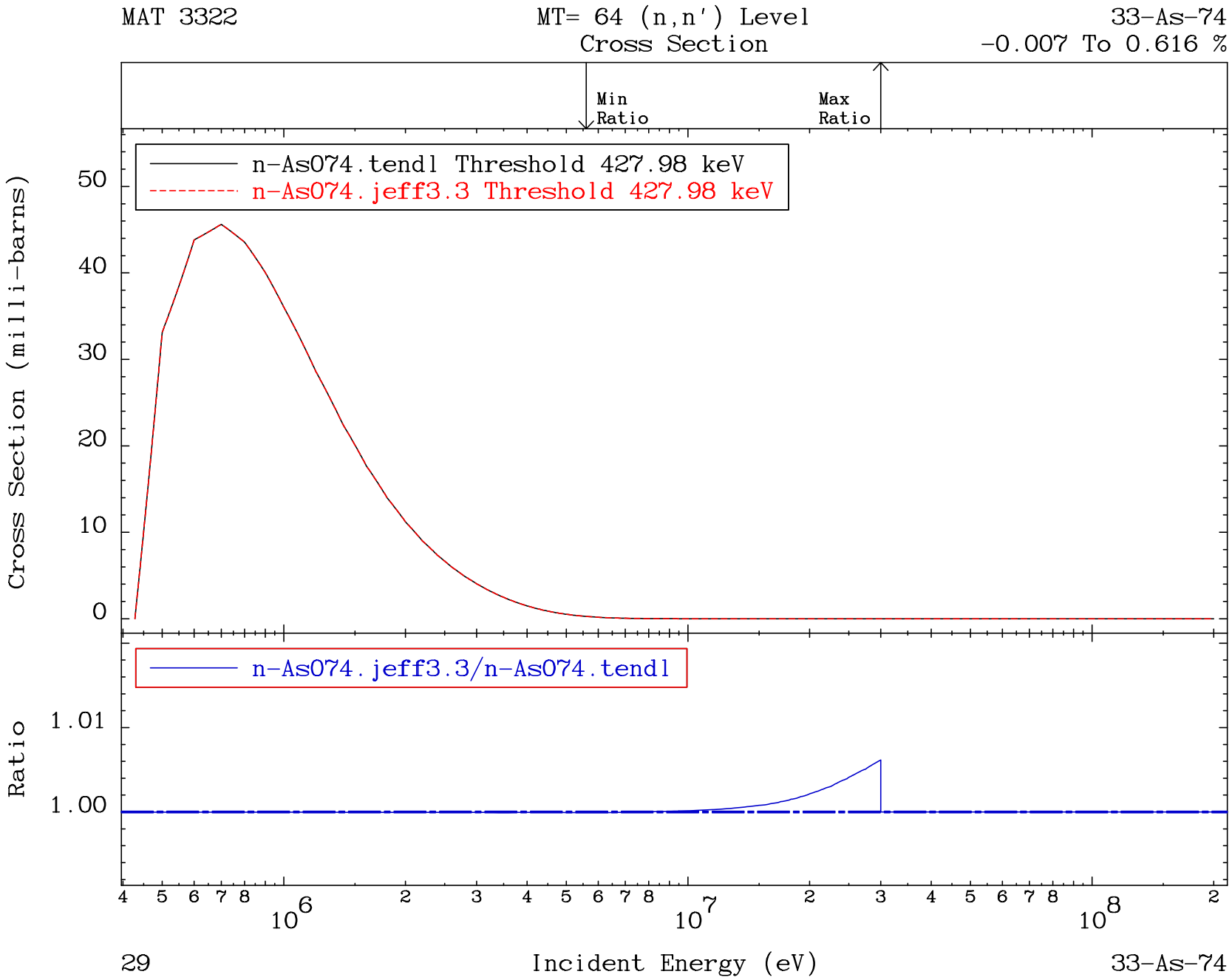

MAT 3322
MT= 58 (n,n') Level
Cross Section
33-As-74
-0.006 To 0.618 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 282.10 keV
n-As074.jeff3.3 Threshold 282.10 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
24
Incident Energy (eV)
33-As-74

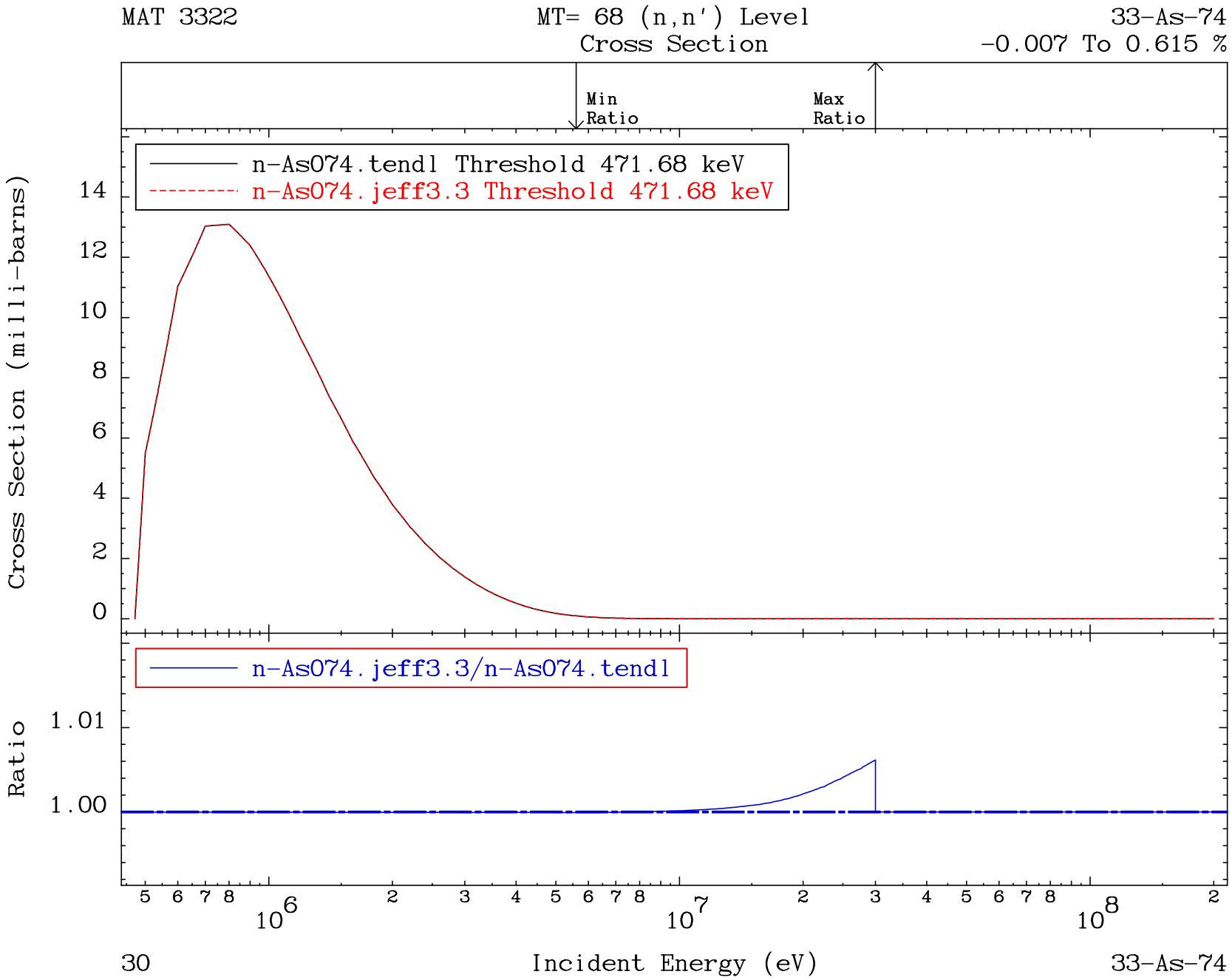

MAT 3322
MT= 59 (n,n') Level
Cross Section
33-As-74
-0.005 To 0.621 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 319.44 keV
n-As074.jeff3.3 Threshold 319.44 keV
Cross Section (milli-barns)
20
15
10
5
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
33-As-74

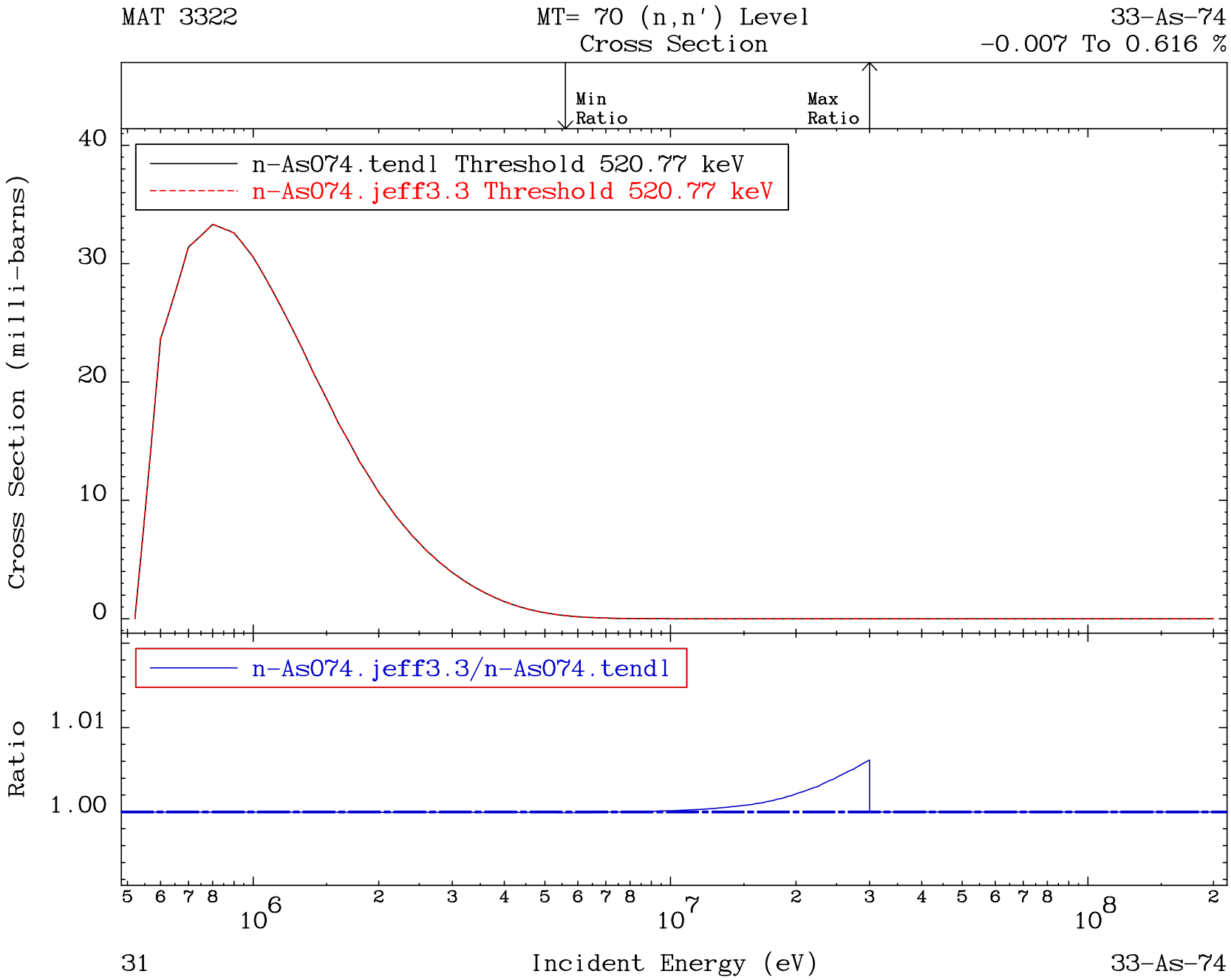

MAT 3322
MT= 60 (n,n') Level
Cross Section
33-As-74
-0.008 To 0.619 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 336.83 keV
n-As074.jeff3.3 Threshold 336.83 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
26
Incident Energy (eV)
33-As-74

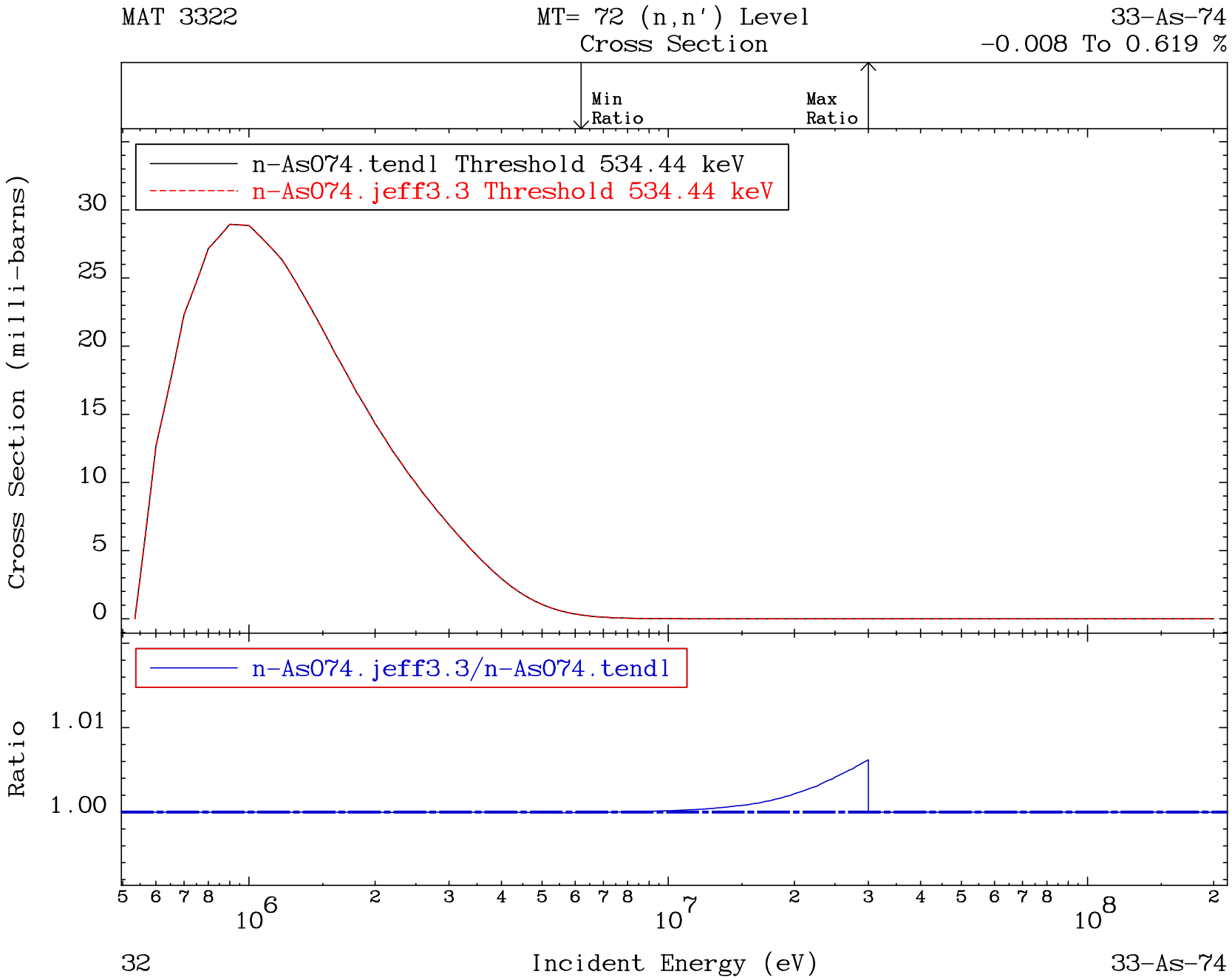

MAT 3322
MT= 62 (n,n') Level
Cross Section
33-As-74
-0.008 To 0.619 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 378.04 keV
n-As074.jeff3.3 Threshold 378.04 keV
Cross Section (milli-barns)
50
40
30
20
10
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
27
Incident Energy (eV)
33-As-74

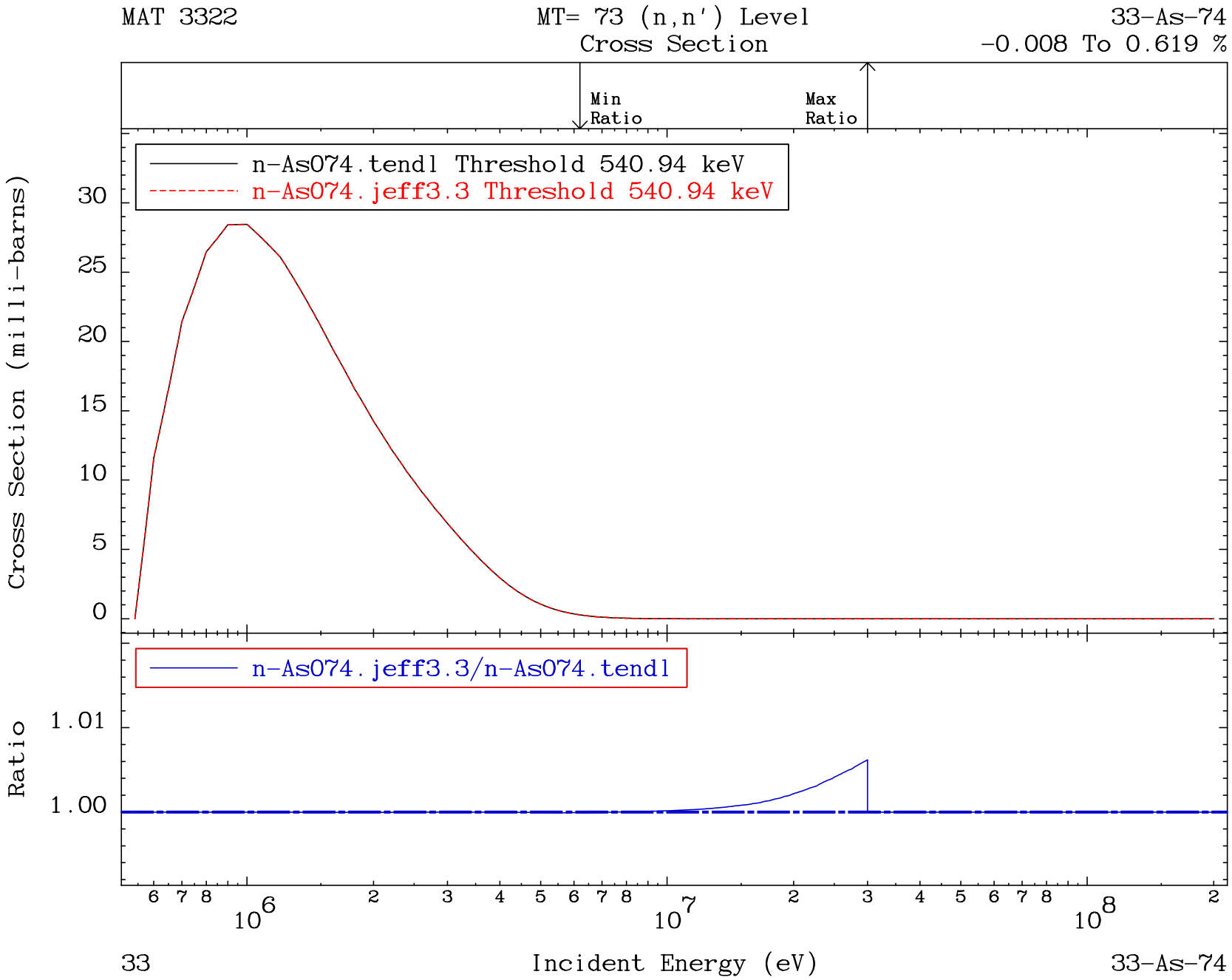

MAT 3322
MT= 63 (n,n') Level
Cross Section
33-As-74
-0.010 To 0.617 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 390.40 keV
n-As074.jeff3.3 Threshold 390.40 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
33-As-74

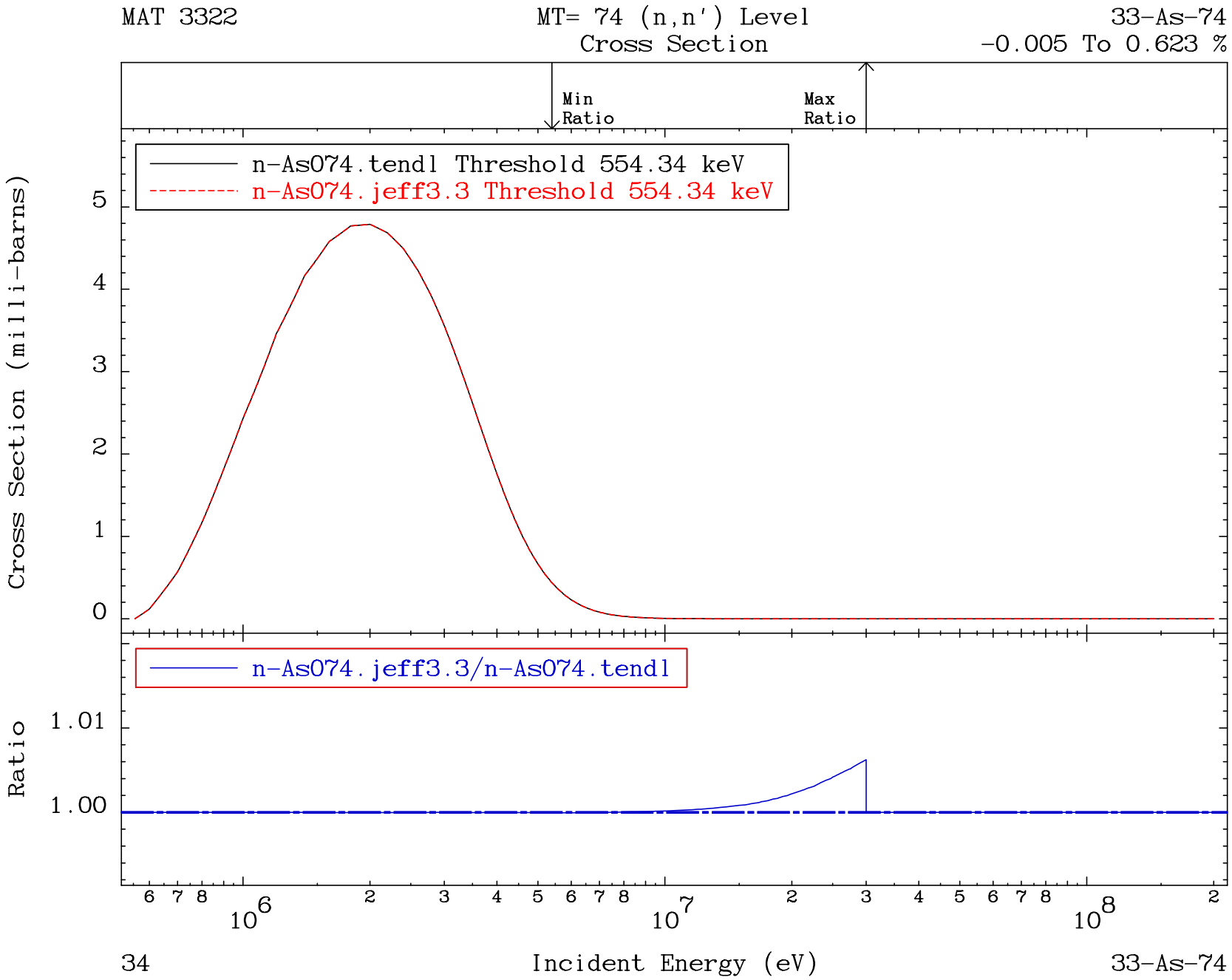

MAT 3322
MT= 64 (n,n') Level
Cross Section
33-As-74
-0.007 To 0.616 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 427.98 keV
n-As074.jeff3.3 Threshold 427.98 keV
Cross Section (milli-barns)
50
40
30
20
10
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
33-As-74

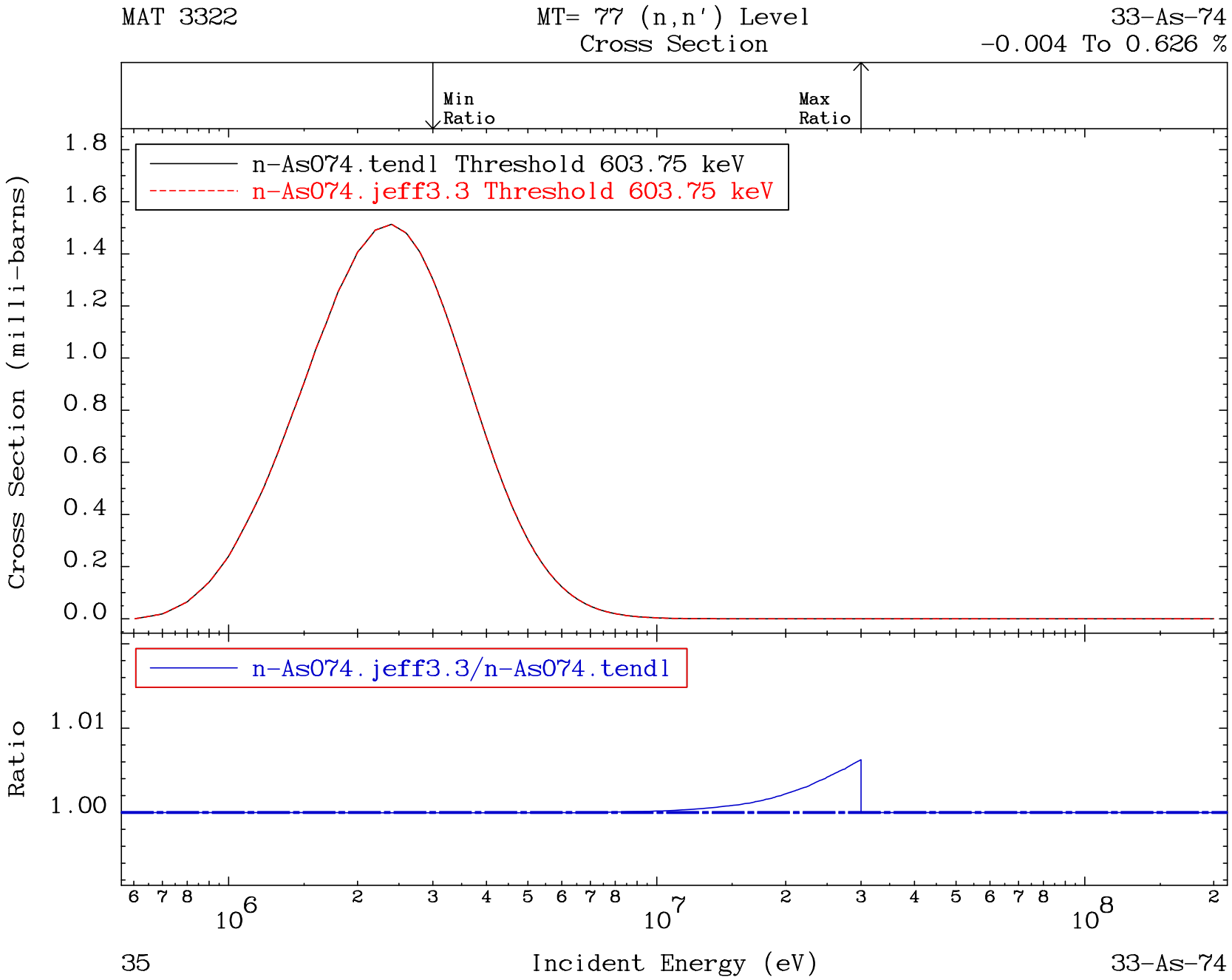

MAT 3322
MT= 68 (n,n') Level
Cross Section
33-As-74
-0.007 To 0.615 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 471.68 keV
n-As074.jeff3.3 Threshold 471.68 keV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
30
Incident Energy (eV)
33-As-74

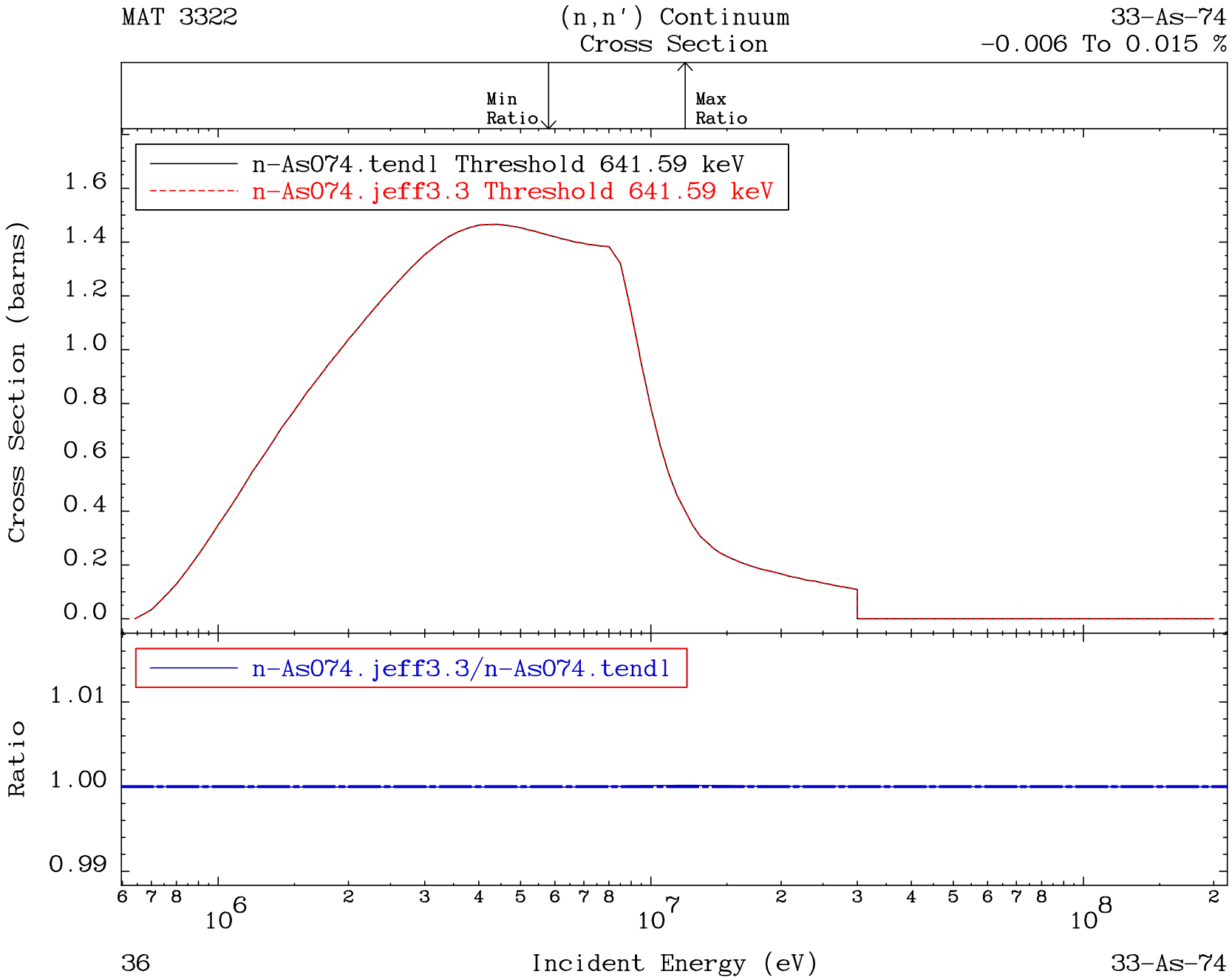

MAT 3322
MT= 70 (n,n') Level
Cross Section
33-As-74
-0.007 To 0.616 %
Min
Ratio
Max
Ratio
n-As074.tendl Threshold 520.77 keV
n-As074.jeff3.3 Threshold 520.77 keV
Cross Section (milli-barns)
40
30
20
10
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
33-As-74

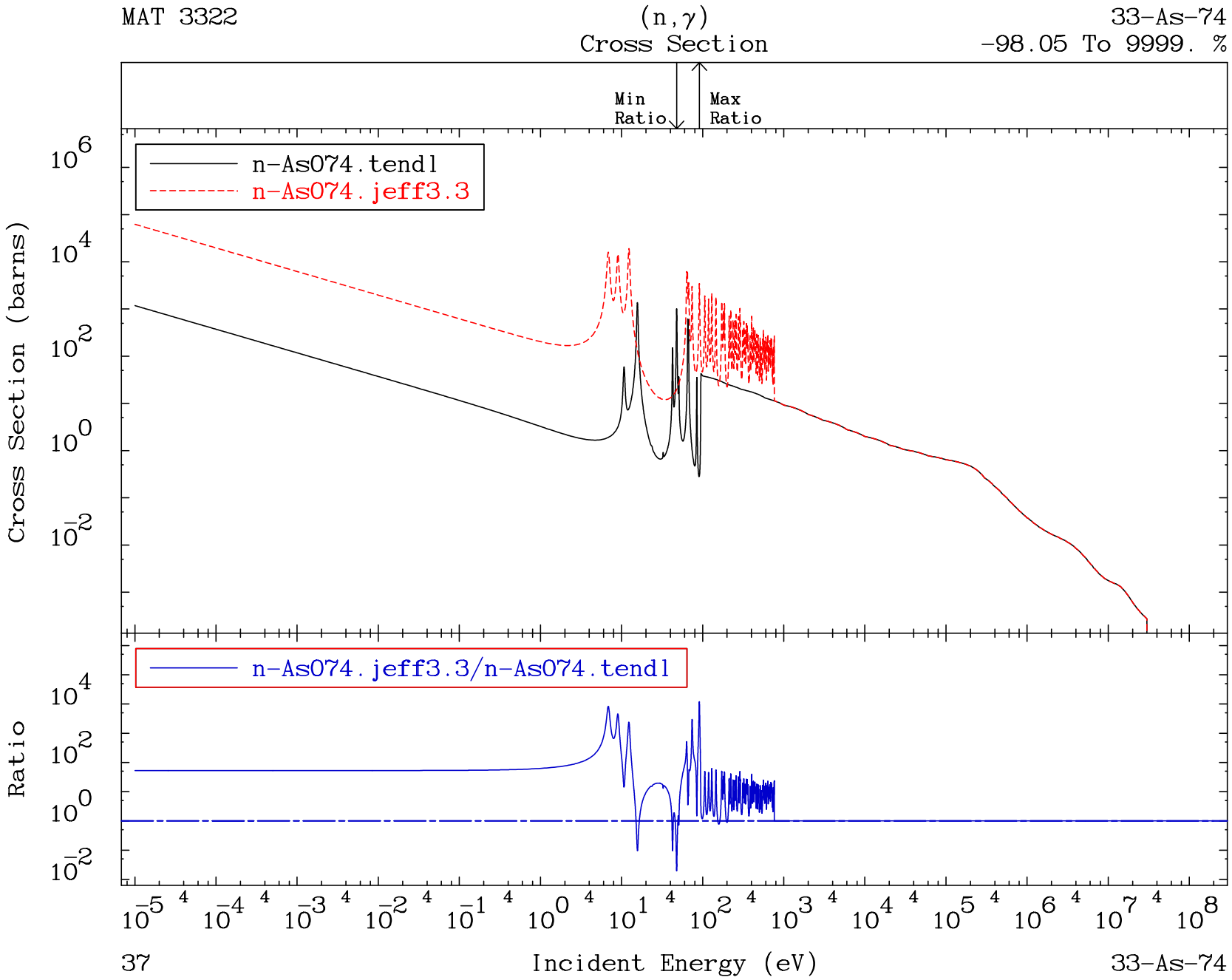

MAT 3322
MT= 72 (n,n') Level
Cross Section
33-As-74
-0.008 To 0.619 %
Min
Ratio
Max
Ratio
n-As074.tendl Threshold 534.44 keV
n-As074.jeff3.3 Threshold 534.44 keV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
32
Incident Energy (eV)
33-As-74

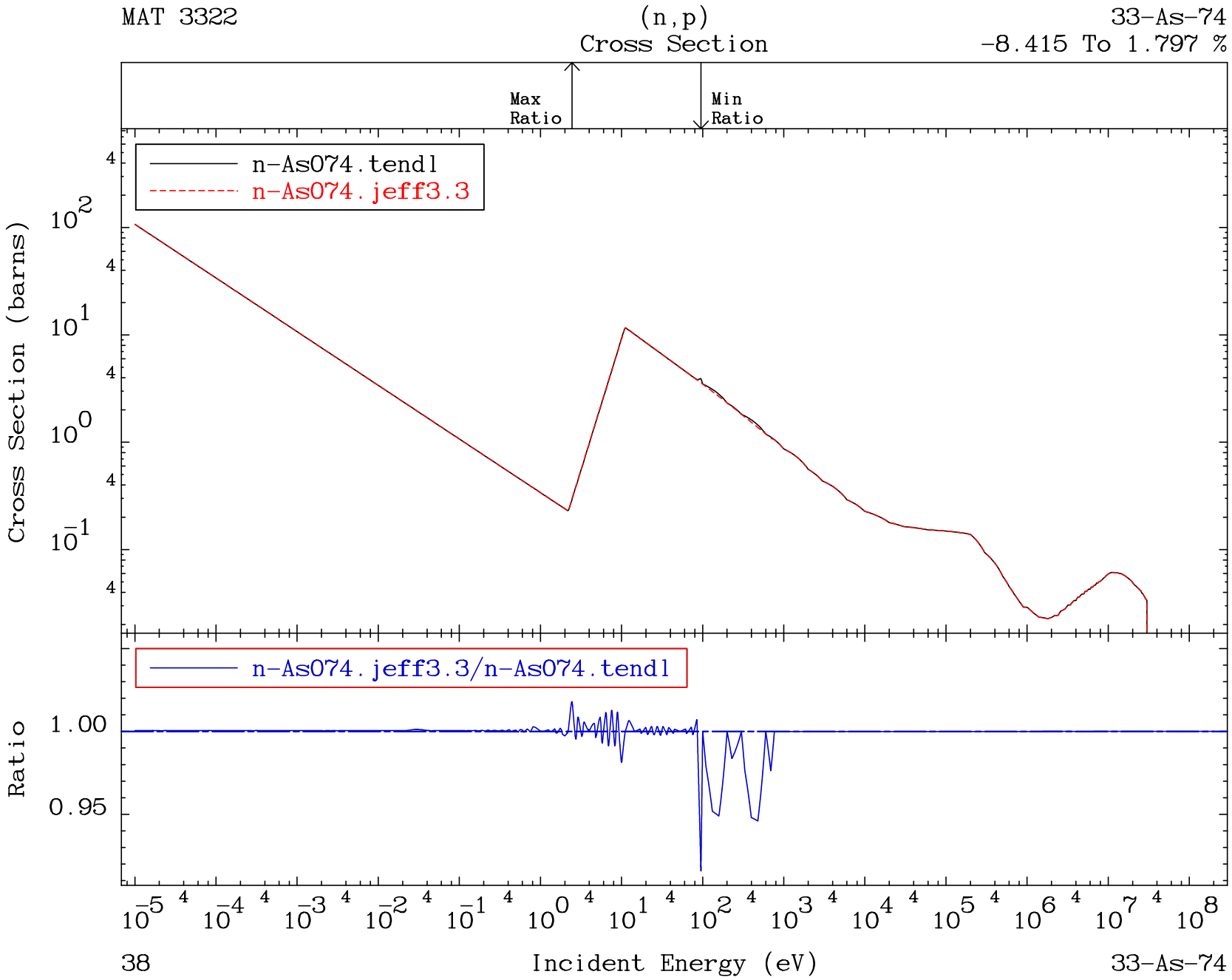

MAT 3322
MT= 73 (n,n') Level
Cross Section
33-As-74
-0.008 To 0.619 %
Min
Ratio
Max
Ratio
n-As074.tendl Threshold 540.94 keV
n-As074.jeff3.3 Threshold 540.94 keV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
33
Incident Energy (eV)
33-As-74

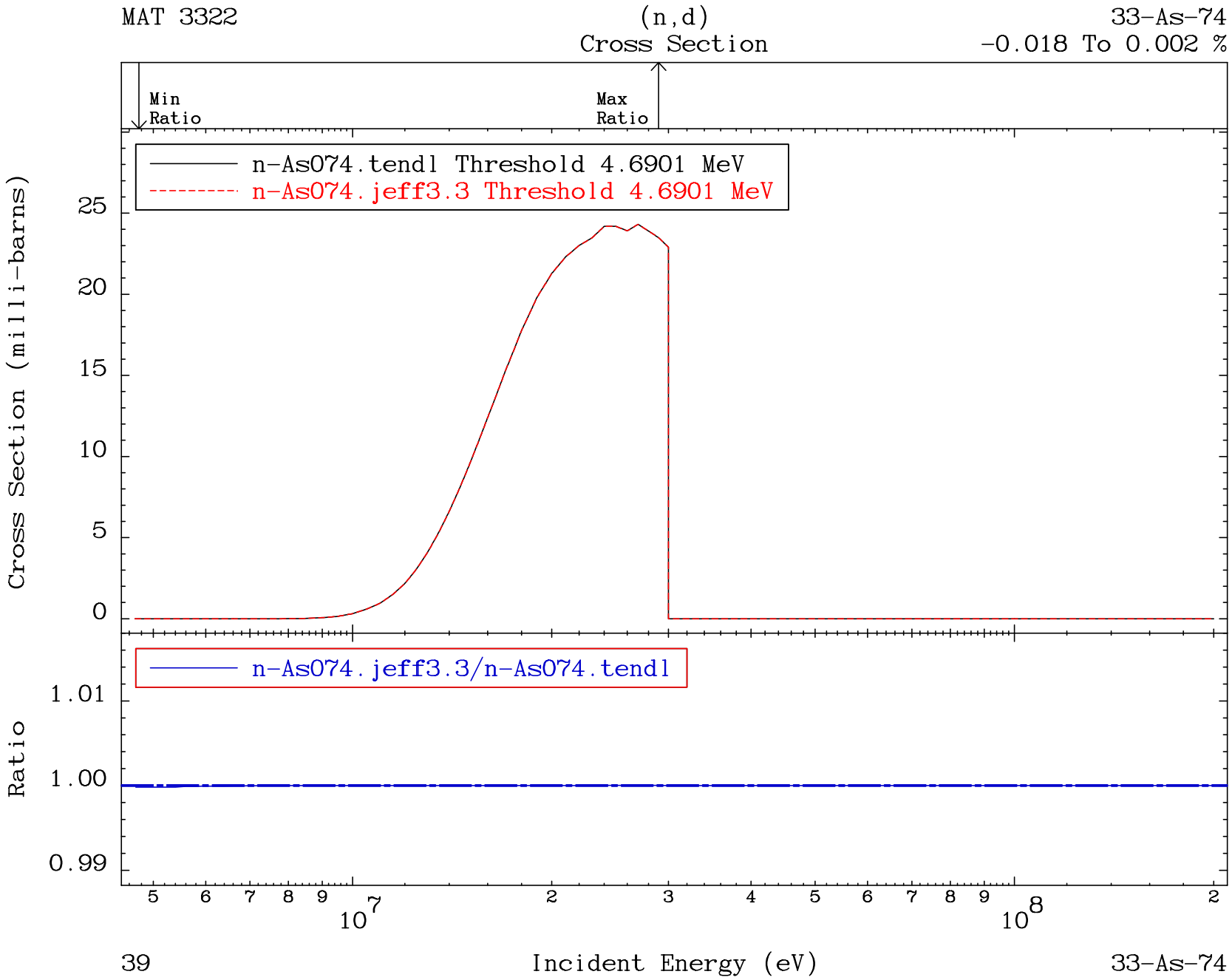

MAT 3322
MT= 74 (n,n') Level
Cross Section
33-As-74
-0.005 To 0.623 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 554.34 keV
n-As074.jeff3.3 Threshold 554.34 keV
Cross Section (milli-barns)
0
1
2
3
4
5
n-As074.jeff3.3/n-As074.tendl
Ratio
1.00
1.01
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
33-As-74

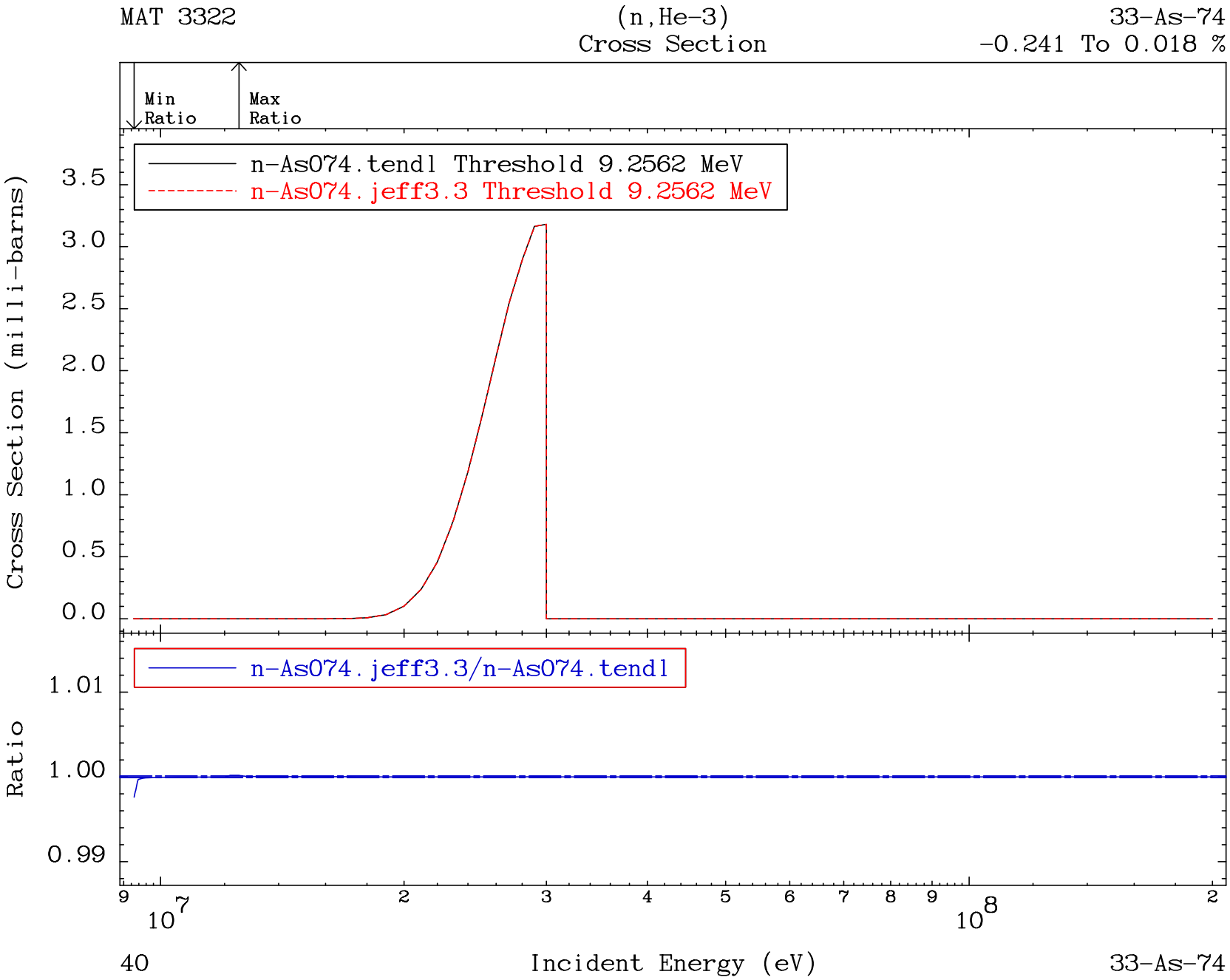

MAT 3322
MT= 77 (n,n') Level
Cross Section
33-As-74
-0.004 To 0.626 %
Min
Ratio
Max
Ratio
n-As074.tendl Threshold 603.75 keV
n-As074.jeff3.3 Threshold 603.75 keV
Cross Section (milli-barns)
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
33-As-74

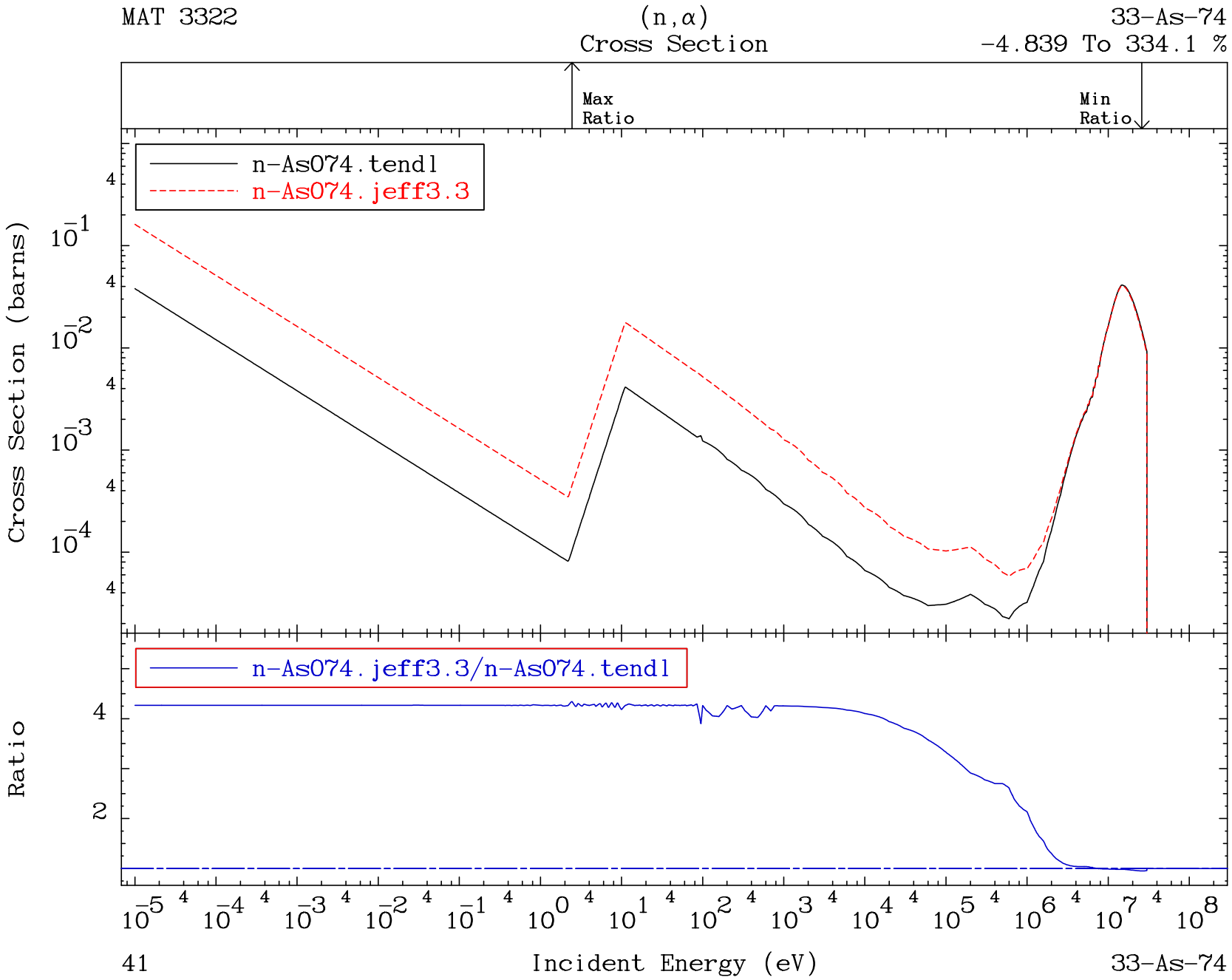

MAT 3322
(n,n') Continuum
Cross Section
33-As-74
-0.006 To 0.015 %
Min
Ratio
Max
Ratio
n-As074.tendl Threshold 641.59 keV
n-As074.jeff3.3 Threshold 641.59 keV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
36
Incident Energy (eV)
33-As-74

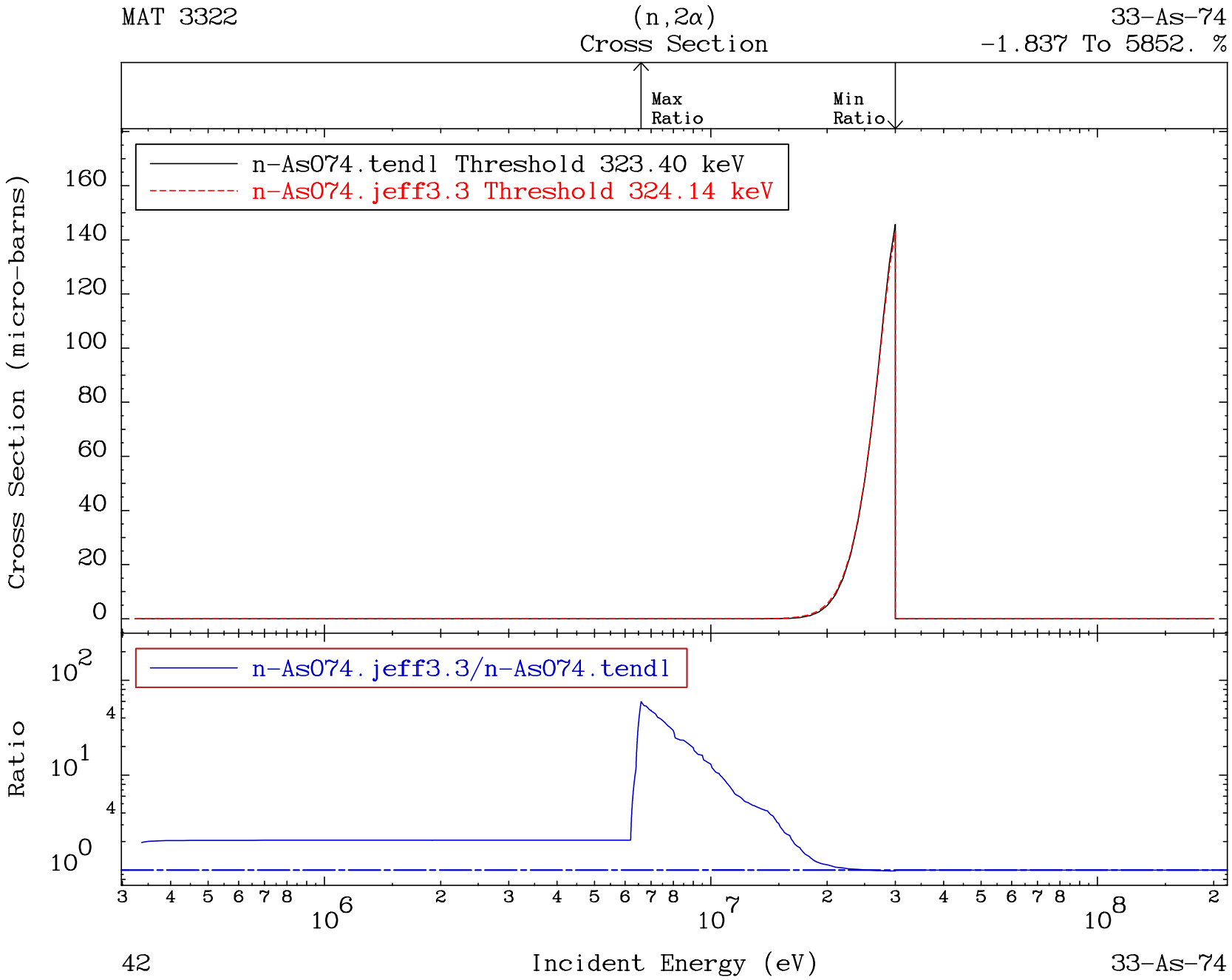

MAT 3322
(n,γ)
Cross Section
33-As-74
-98.05 To 9999. %
Min Ratio
Max Ratio
n-As074.tendl
n-As074.jeff3.3
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
Incident Energy (eV)
37
33-As-74

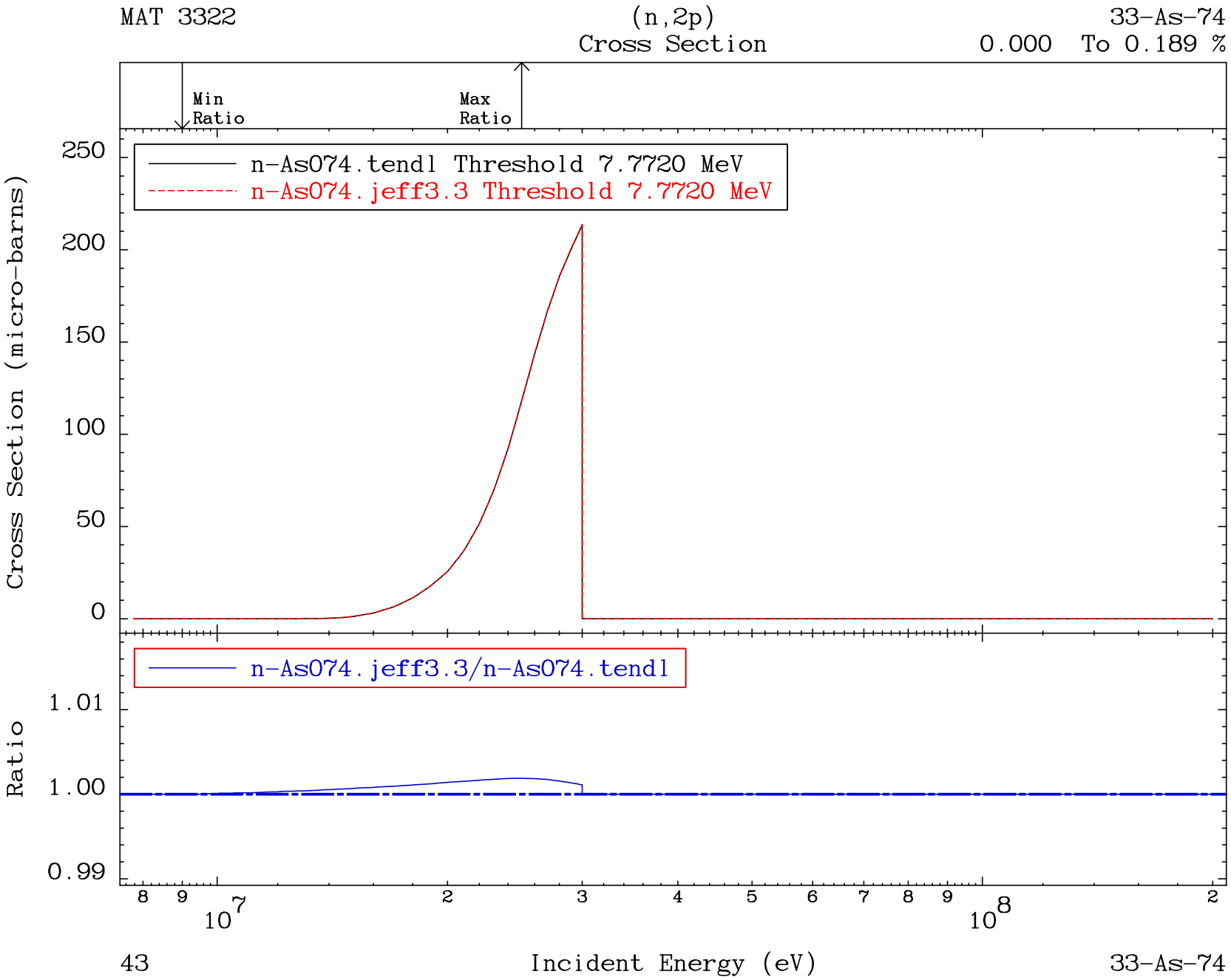

MAT 3322
(n,p)
Cross Section
33-As-74
-8.415 To 1.797 %
Max Ratio
Min Ratio
n-As074.tendl
n-As074.jeff3.3
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
1.00
0.95
38
Incident Energy (eV)
33-As-74

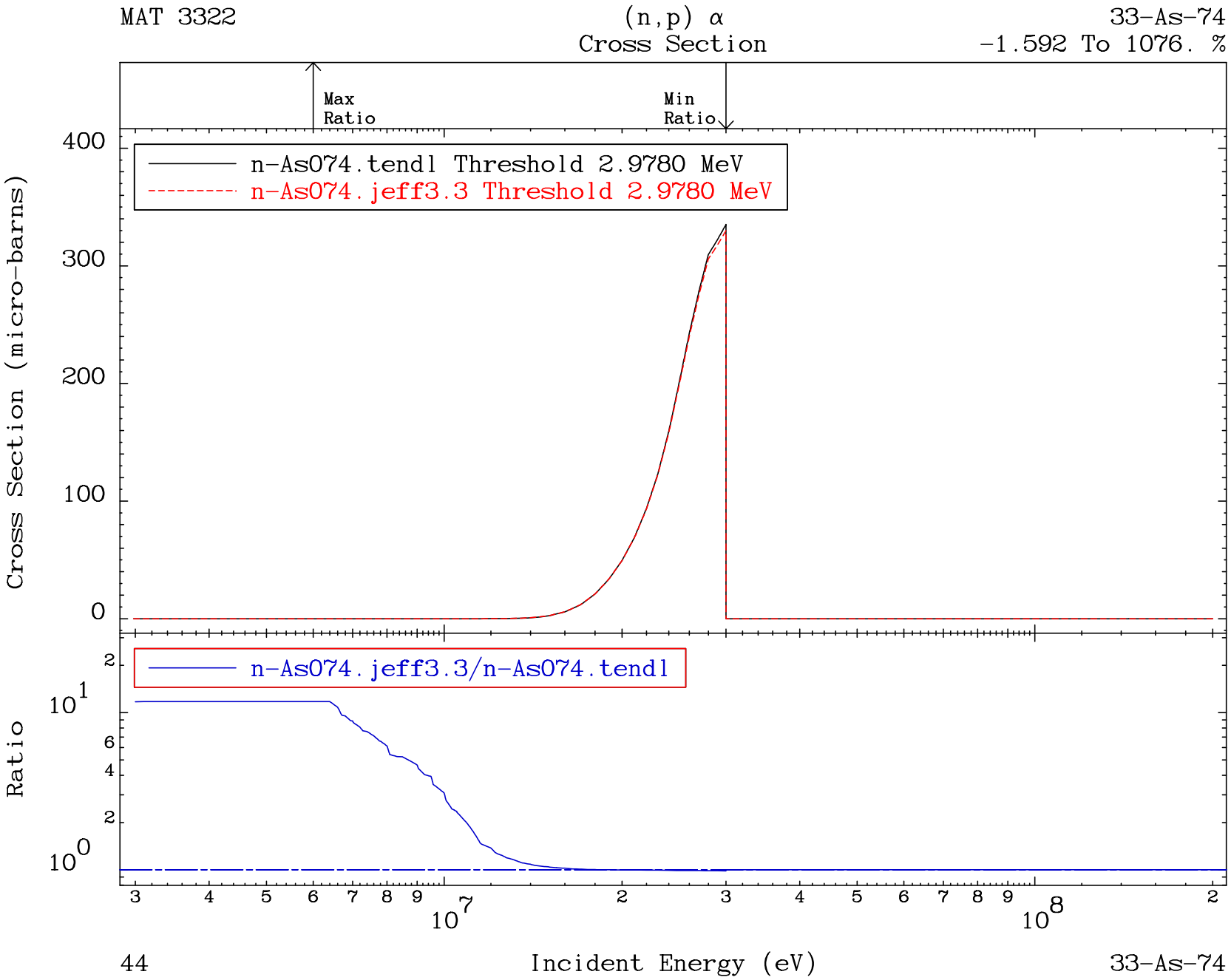

MAT 3322
(n,d)
Cross Section
33-As-74
-0.018 To 0.002 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 4.6901 MeV
n-As074.jeff3.3 Threshold 4.6901 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
39
Incident Energy (eV)
33-As-74

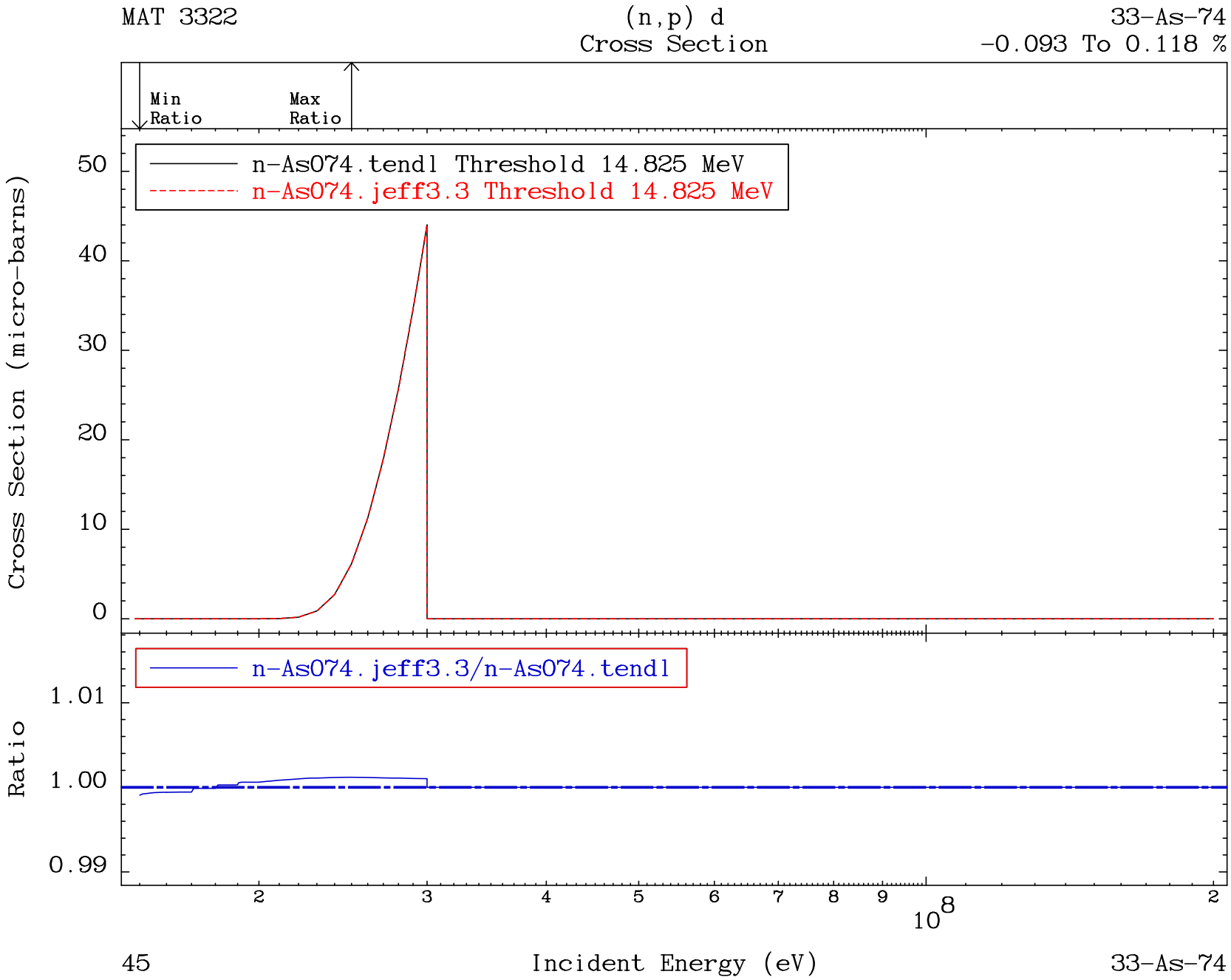

MAT 3322
(n,He-3)
Cross Section
33-As-74
-0.241 To 0.018 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 9.2562 MeV
n-As074.jeff3.3 Threshold 9.2562 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
40
Incident Energy (eV)
33-As-74

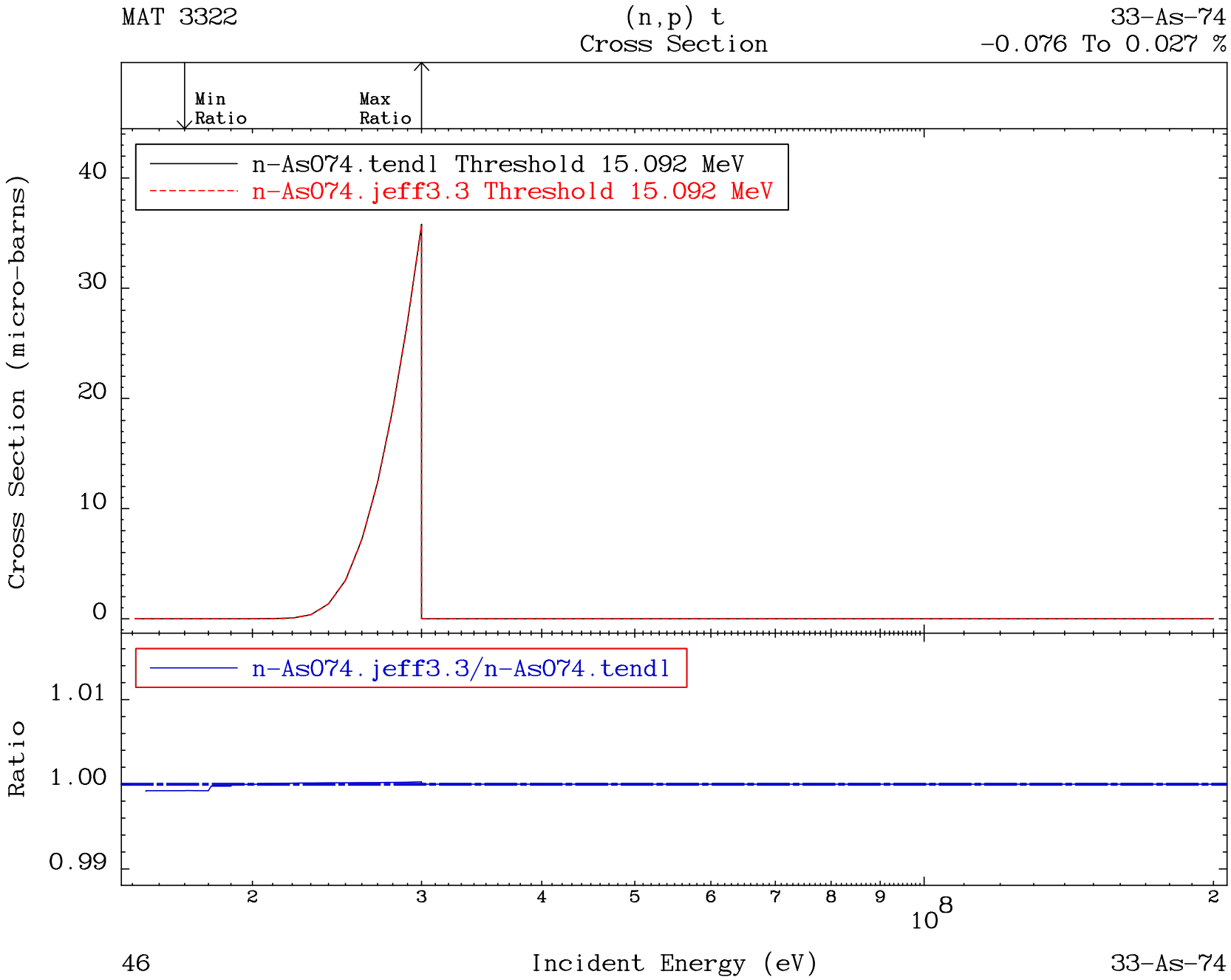

MAT 3322
(n,α)
Cross Section
33-As-74
-4.839 To 334.1 %
Max Ratio
Min Ratio
n-As074.tendl
n-As074.jeff3.3
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
Incident Energy (eV)
41
33-As-74

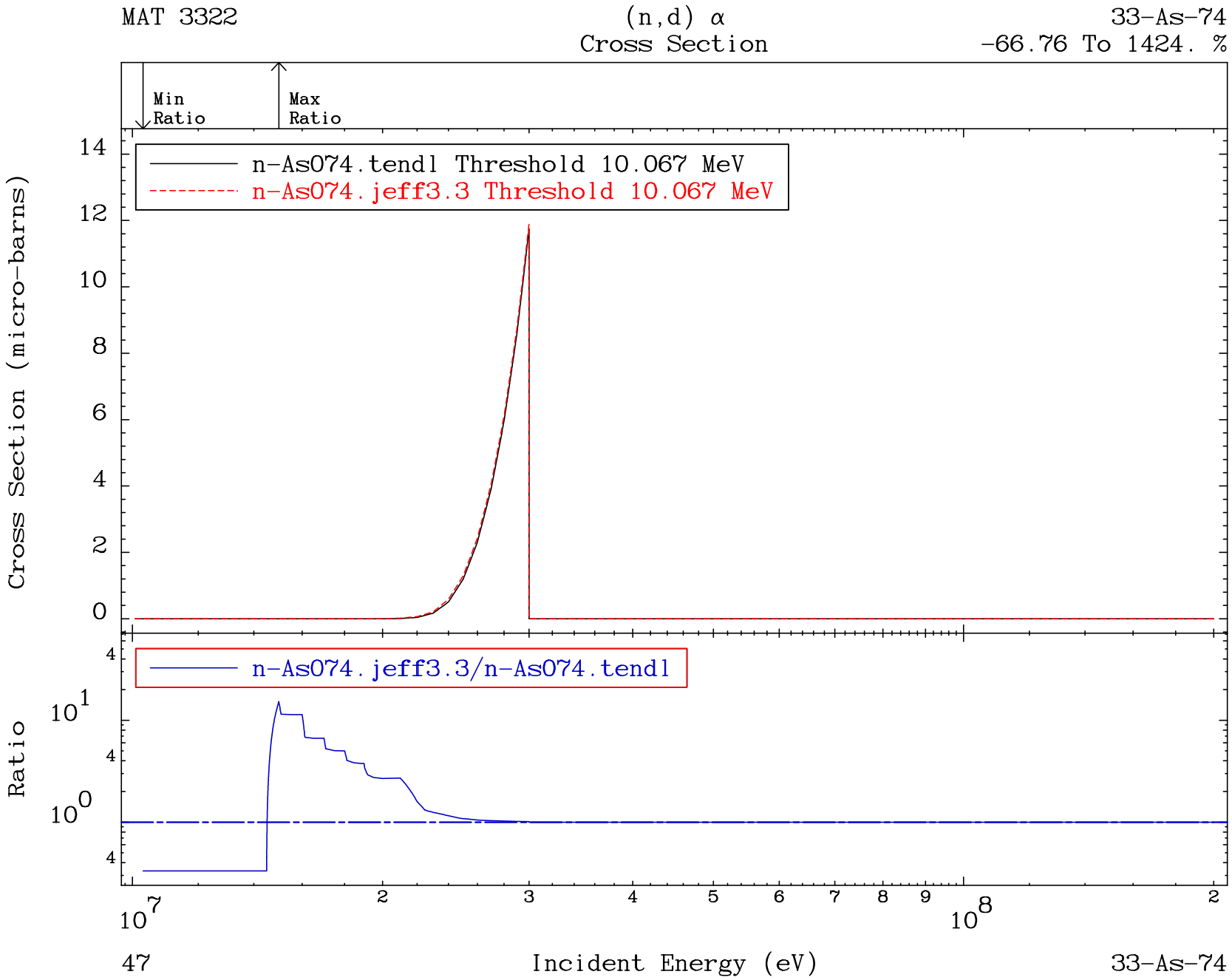

MAT 3322
(n,2α)
Cross Section
33-As-74
-1.837 To 5852. %
Max Ratio
Min Ratio
n-As074.tendl Threshold 323.40 keV
n-As074.jeff3.3 Threshold 324.14 keV
Cross Section (micro-barns)
160
140
120
100
80
60
40
20
0
n-As074.jeff3.3/n-As074.tendl
Ratio
10^2
10^1
10^0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
42
Incident Energy (eV)
33-As-74

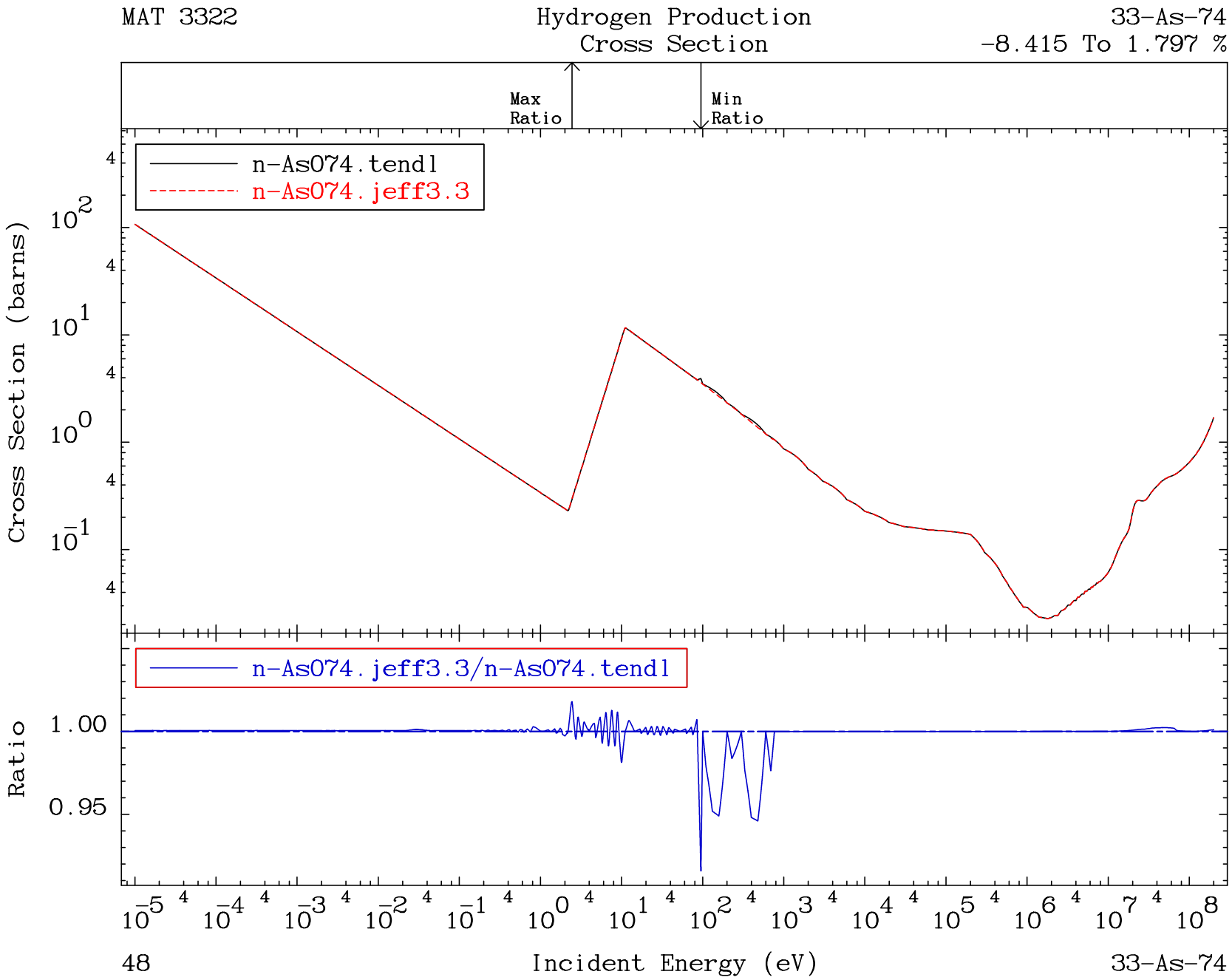

MAT 3322
(n,2p)
Cross Section
33-As-74
0.000 To 0.189 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 7.7720 MeV
n-As074.jeff3.3 Threshold 7.7720 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
43
Incident Energy (eV)
33-As-74

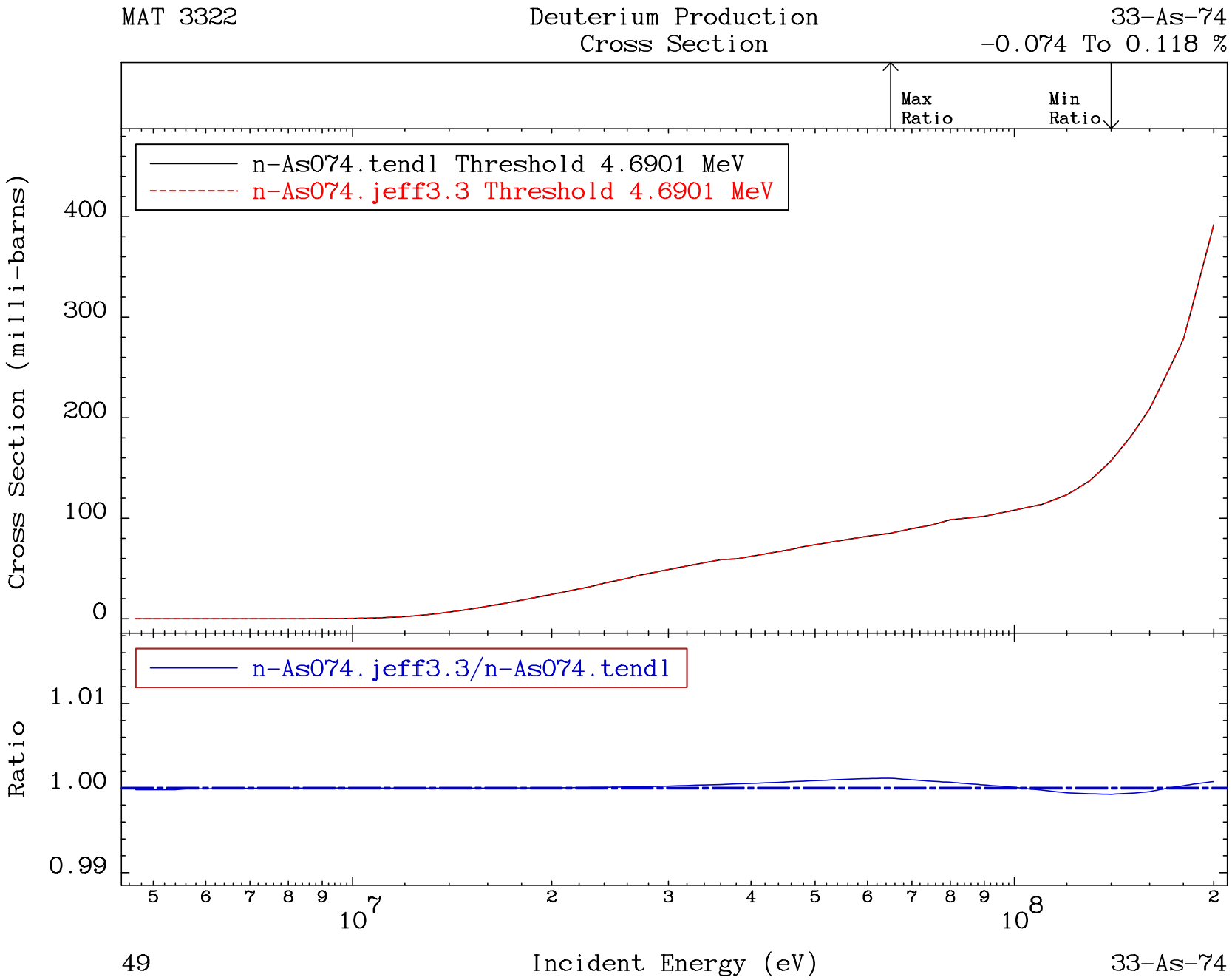

MAT 3322
(n,p) α
Cross Section
33-As-74
-1.592 To 1076. %
Max Ratio
Min Ratio
n-As074.tendl Threshold 2.9780 MeV
n-As074.jeff3.3 Threshold 2.9780 MeV
Cross Section (micro-barns)
400
300
200
100
0
n-As074.jeff3.3/n-As074.tendl
Ratio
2
10^1
6
4
2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
44
Incident Energy (eV)
33-As-74

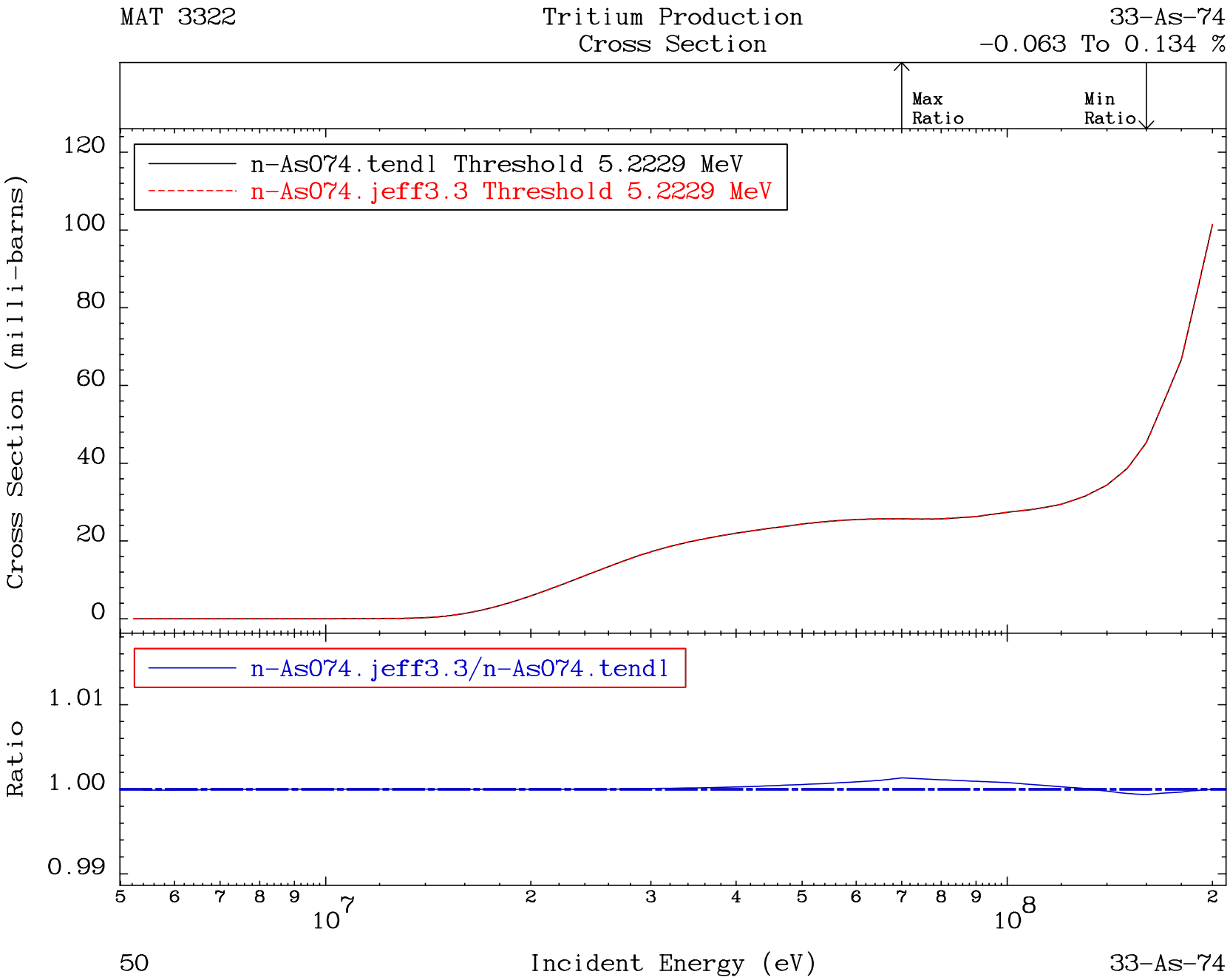

MAT 3322
(n,p) d
Cross Section
33-As-74
-0.093 To 0.118 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 14.825 MeV
n-As074.jeff3.3 Threshold 14.825 MeV
Cross Section (micro-barns)
50
40
30
20
10
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
45
Incident Energy (eV)
33-As-74

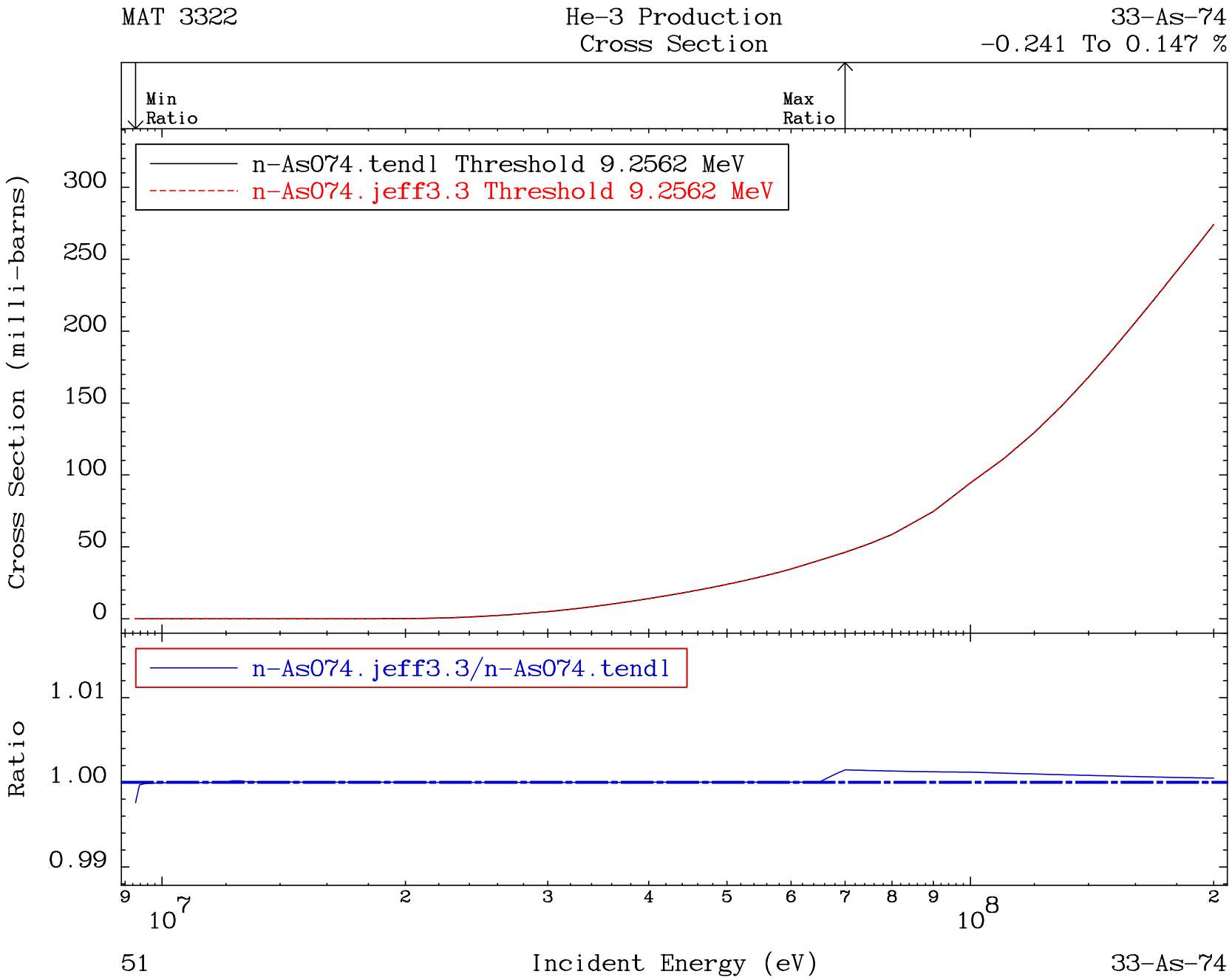

MAT 3322
(n,p) t
Cross Section
33-As-74
-0.076 To 0.027 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 15.092 MeV
n-As074.jeff3.3 Threshold 15.092 MeV
Cross Section (micro-barns)
40
30
20
10
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
46
Incident Energy (eV)
33-As-74

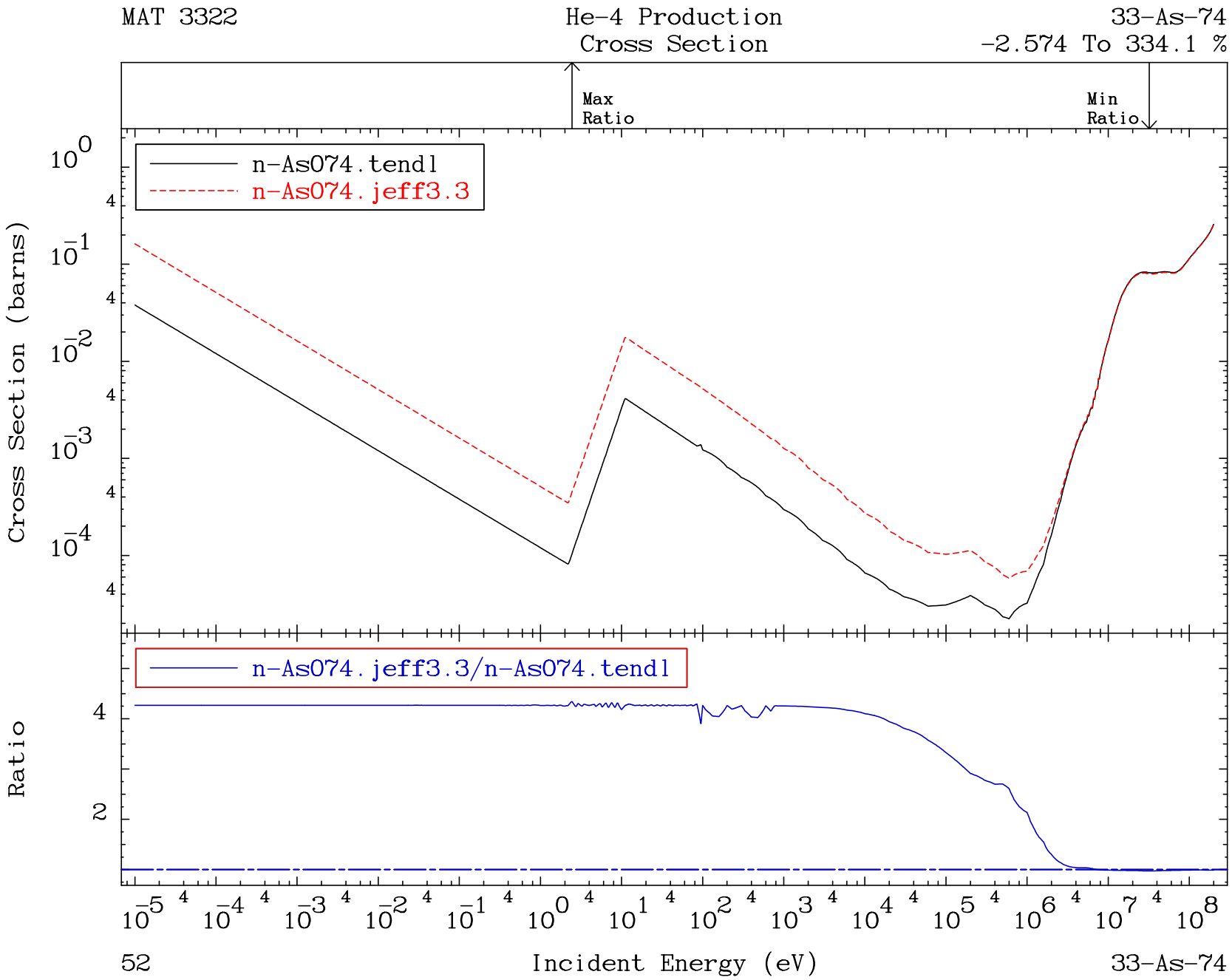

MAT 3322
(n,d) α
Cross Section
33-As-74
-66.76 To 1424. %
Min Ratio
Max Ratio
n-As074.tendl Threshold 10.067 MeV
n-As074.jeff3.3 Threshold 10.067 MeV
Cross Section (micro-barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
Incident Energy (eV)
47
33-As-74

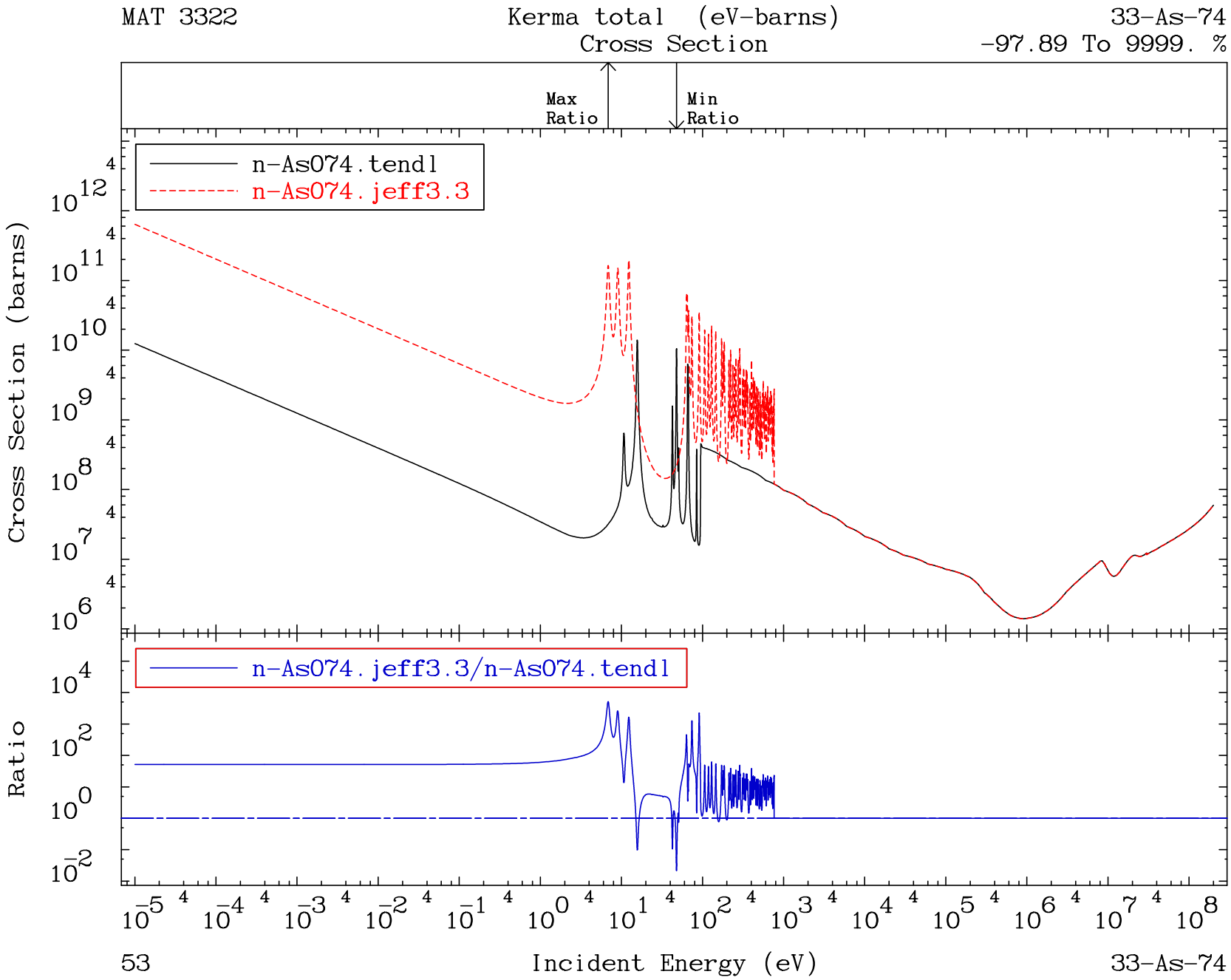

MAT 3322
Hydrogen Production
Cross Section
33-As-74
-8.415 To 1.797 %
Max Ratio
Min Ratio
n-As074.tendl
n-As074.jeff3.3
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
1.00
0.95
Incident Energy (eV)
48
33-As-74

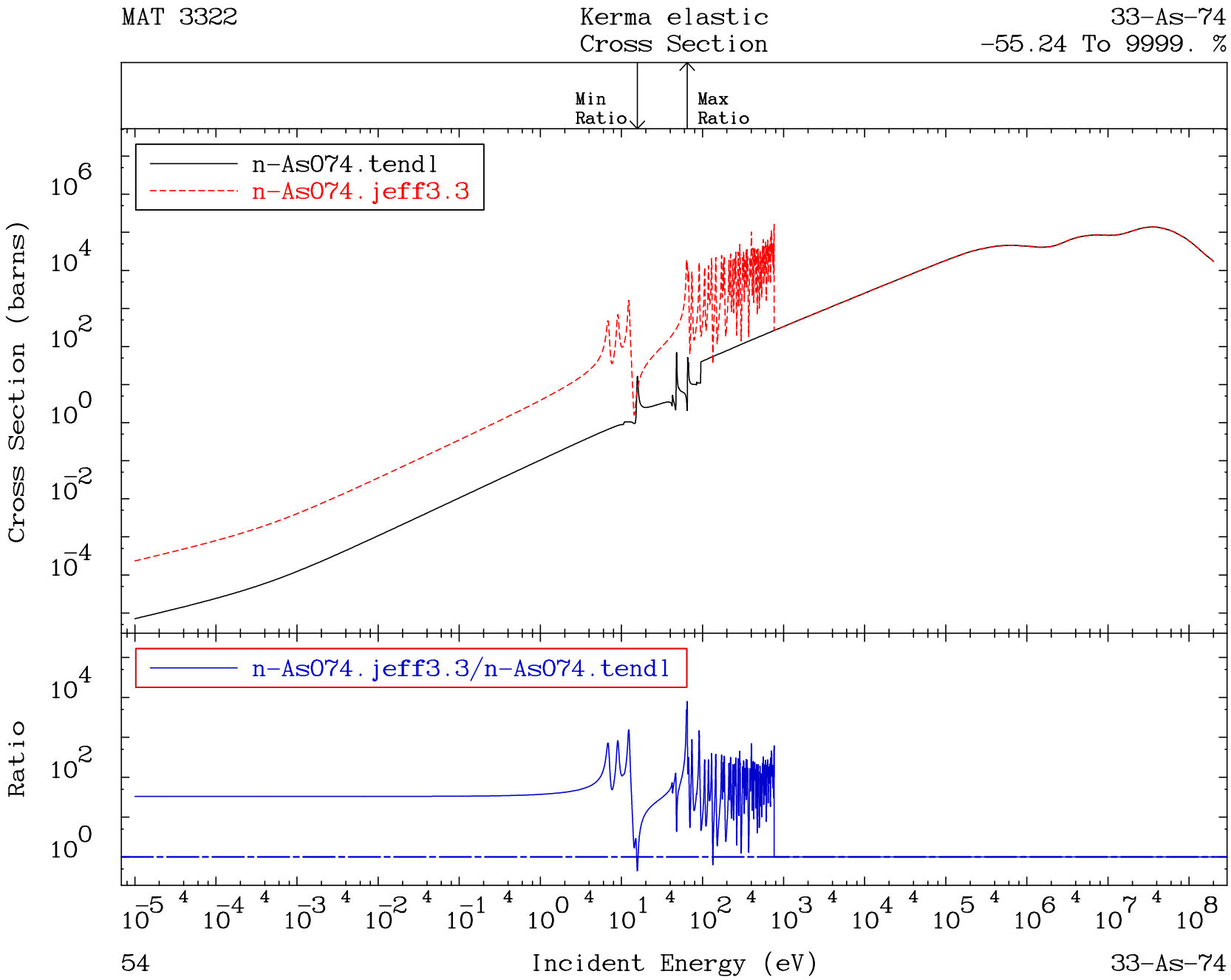

MAT 3322
Deuterium Production
Cross Section
33-As-74
-0.074 To 0.118 %
Max Ratio
Min Ratio
n-As074.tendl Threshold 4.6901 MeV
n-As074.jeff3.3 Threshold 4.6901 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
49
Incident Energy (eV)
33-As-74

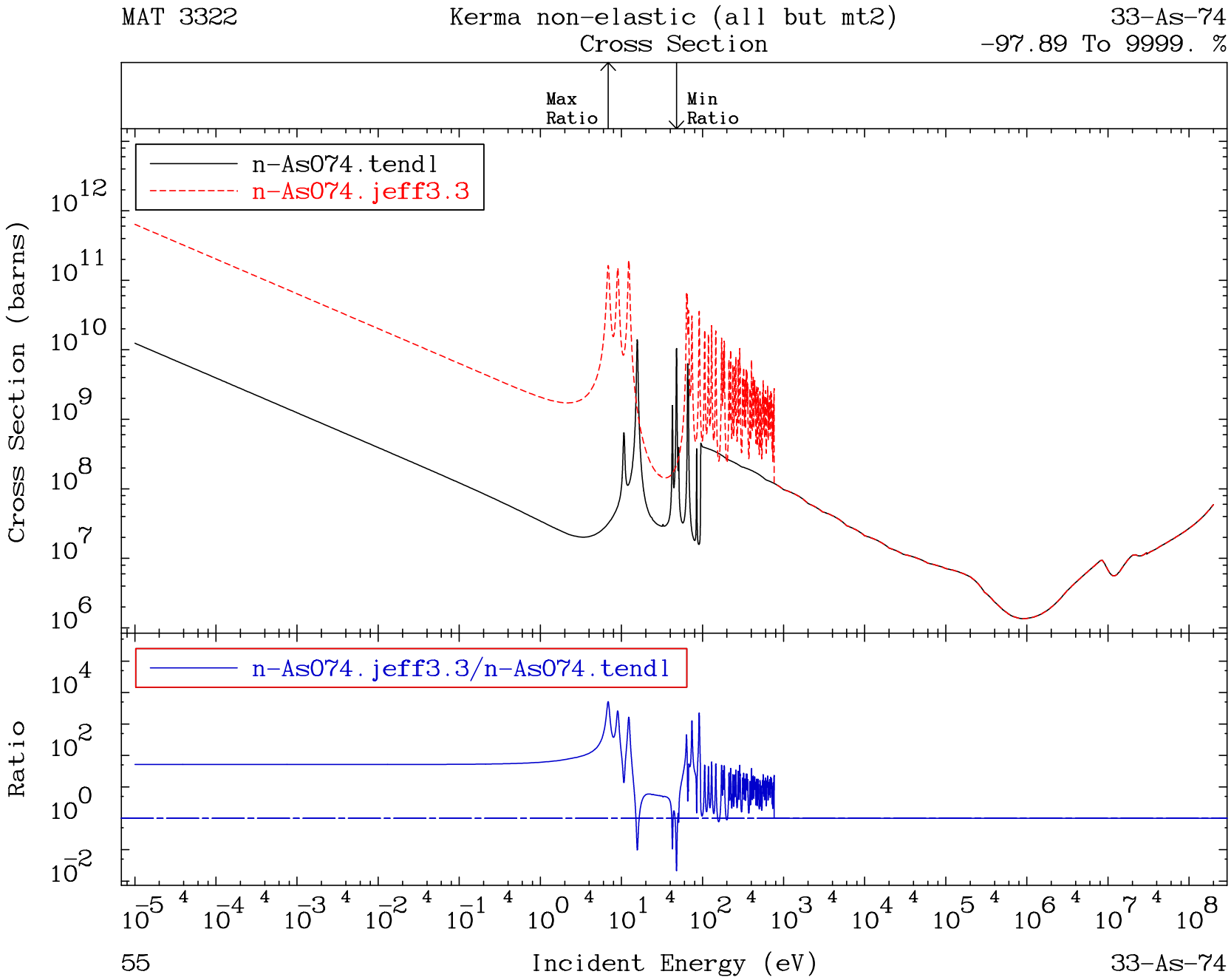

MAT 3322
Tritium Production
Cross Section
33-As-74
-0.063 To 0.134 %
Max
Ratio
Min
Ratio
n-As074.tendl Threshold 5.2229 MeV
n-As074.jeff3.3 Threshold 5.2229 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
50
Incident Energy (eV)
33-As-74

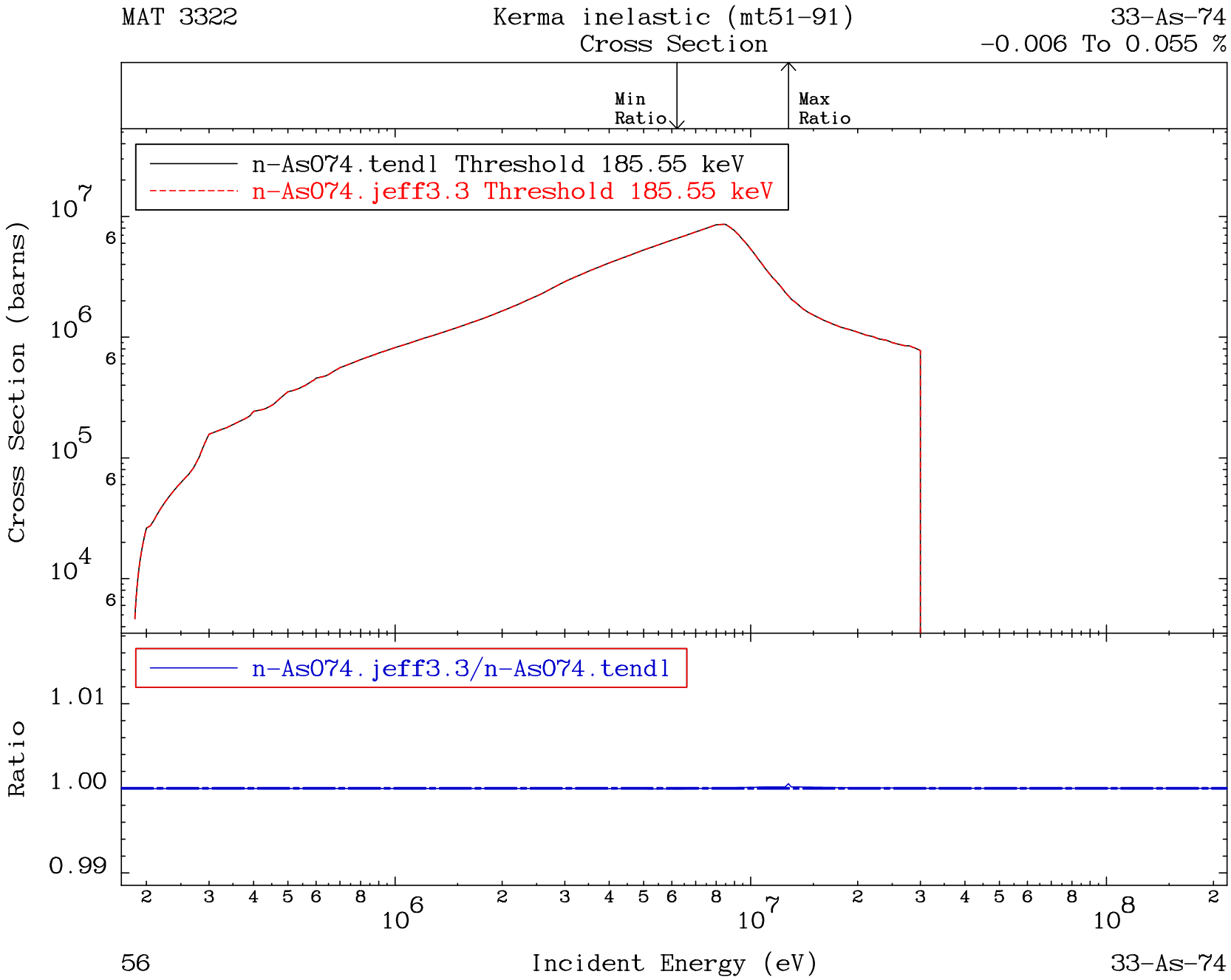

MAT 3322
He-3 Production
Cross Section
33-As-74
-0.241 To 0.147 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 9.2562 MeV
n-As074.jeff3.3 Threshold 9.2562 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
51
Incident Energy (eV)
33-As-74

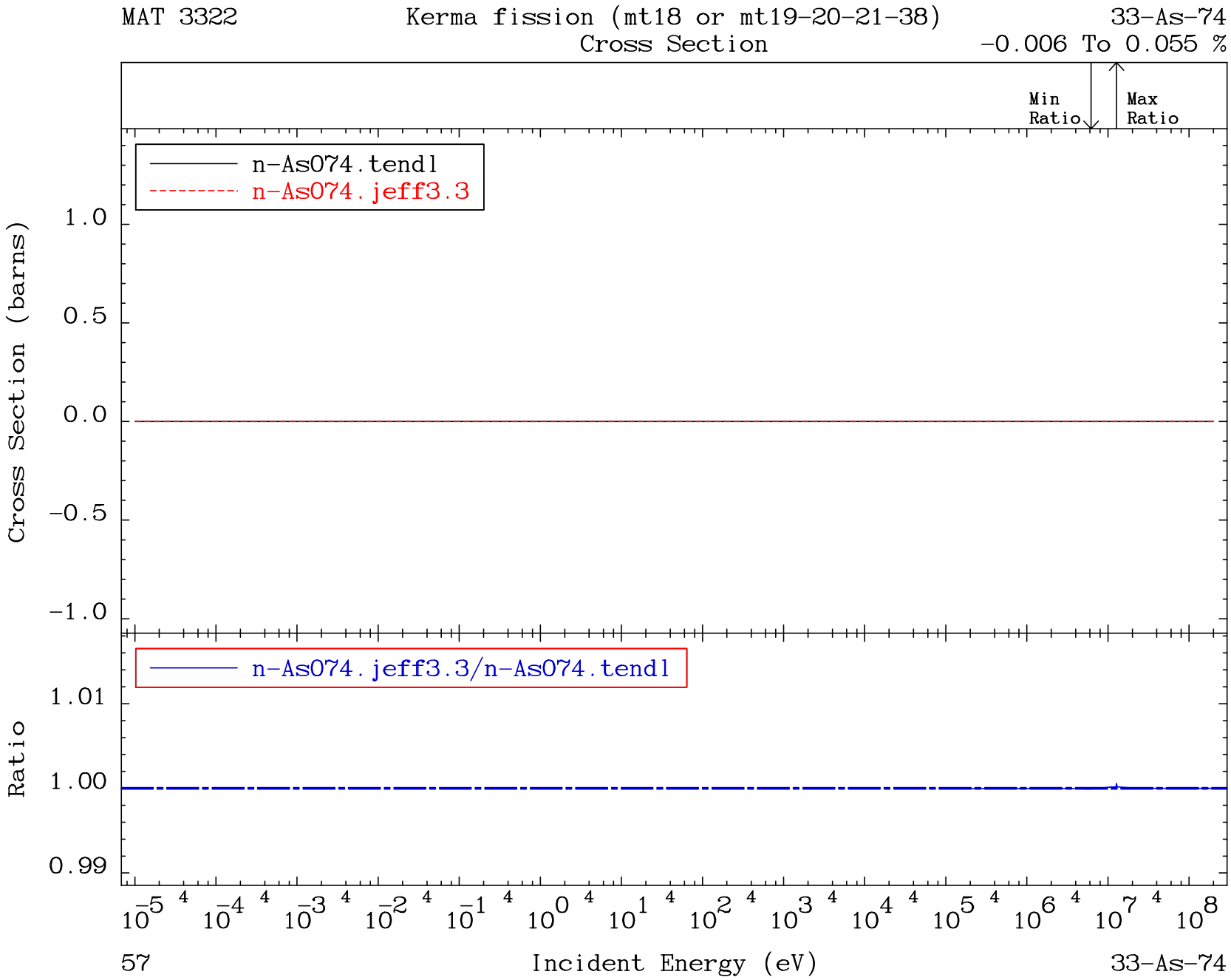

MAT 3322
He-4 Production
Cross Section
33-As-74
-2.574 To 334.1 %
Max
Ratio
Min
Ratio
n-As074.tendl
n-As074.jeff3.3
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
Incident Energy (eV)
52
33-As-74

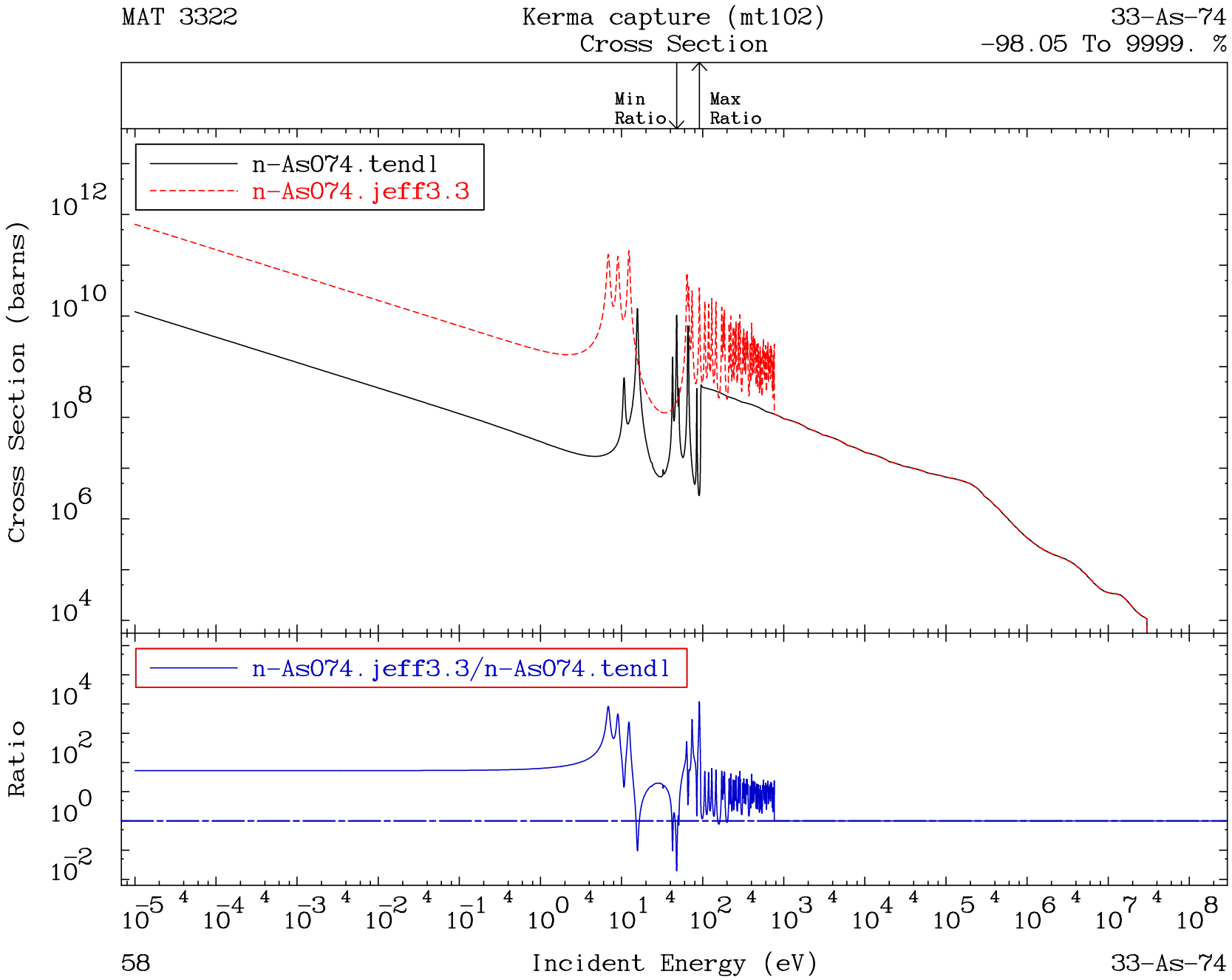

MAT 3322
Kerma total (eV-barns)
Cross Section
33-As-74
-97.89 To 9999. %
Max Ratio
Min Ratio
n-As074.tendl
n-As074.jeff3.3
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
53
Incident Energy (eV)
33-As-74

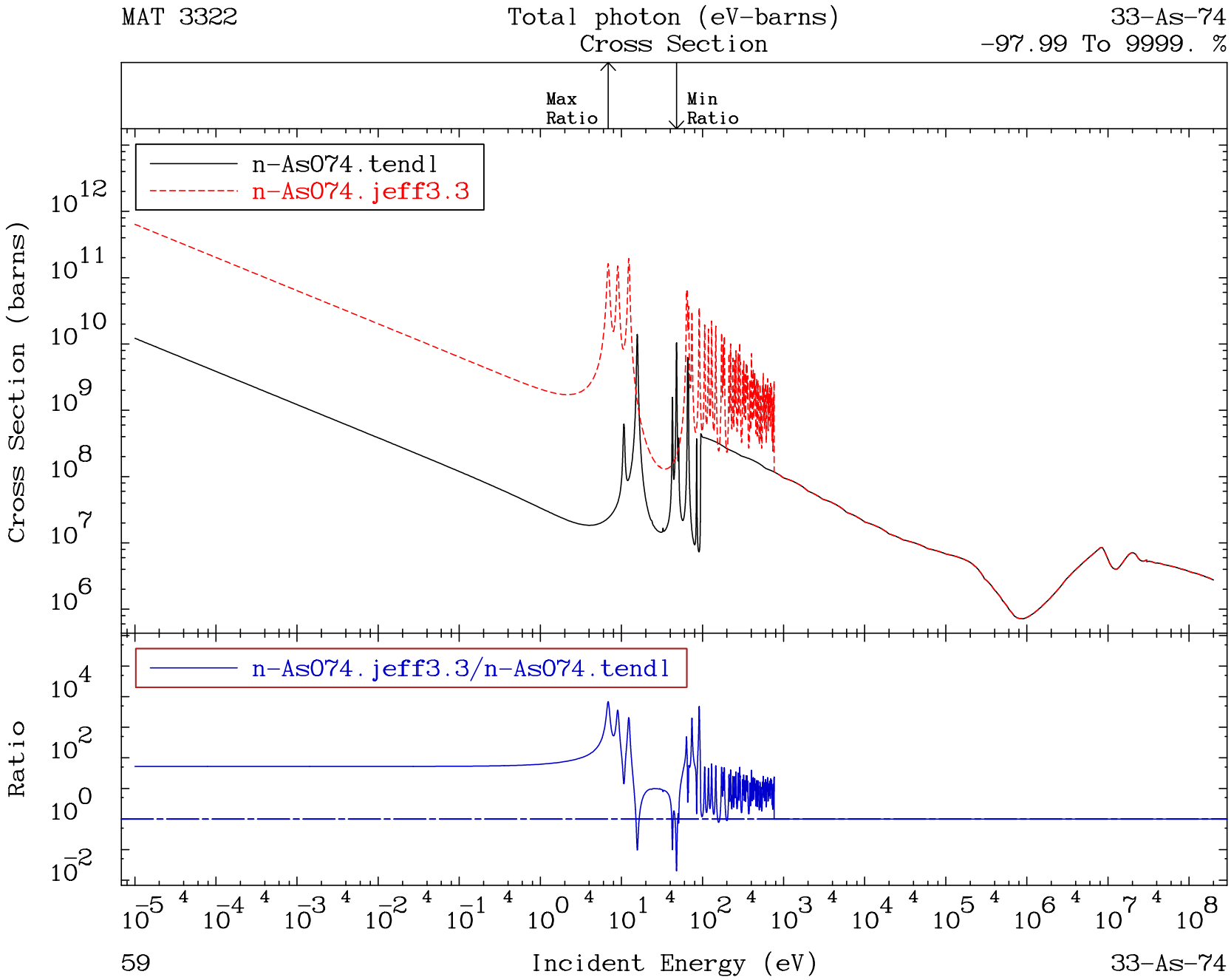

MAT 3322
Kerma elastic
Cross Section
33-As-74
-55.24 To 9999. %
Min
Ratio
Max
Ratio
n-As074.tendl
n-As074.jeff3.3
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
Incident Energy (eV)
54
33-As-74

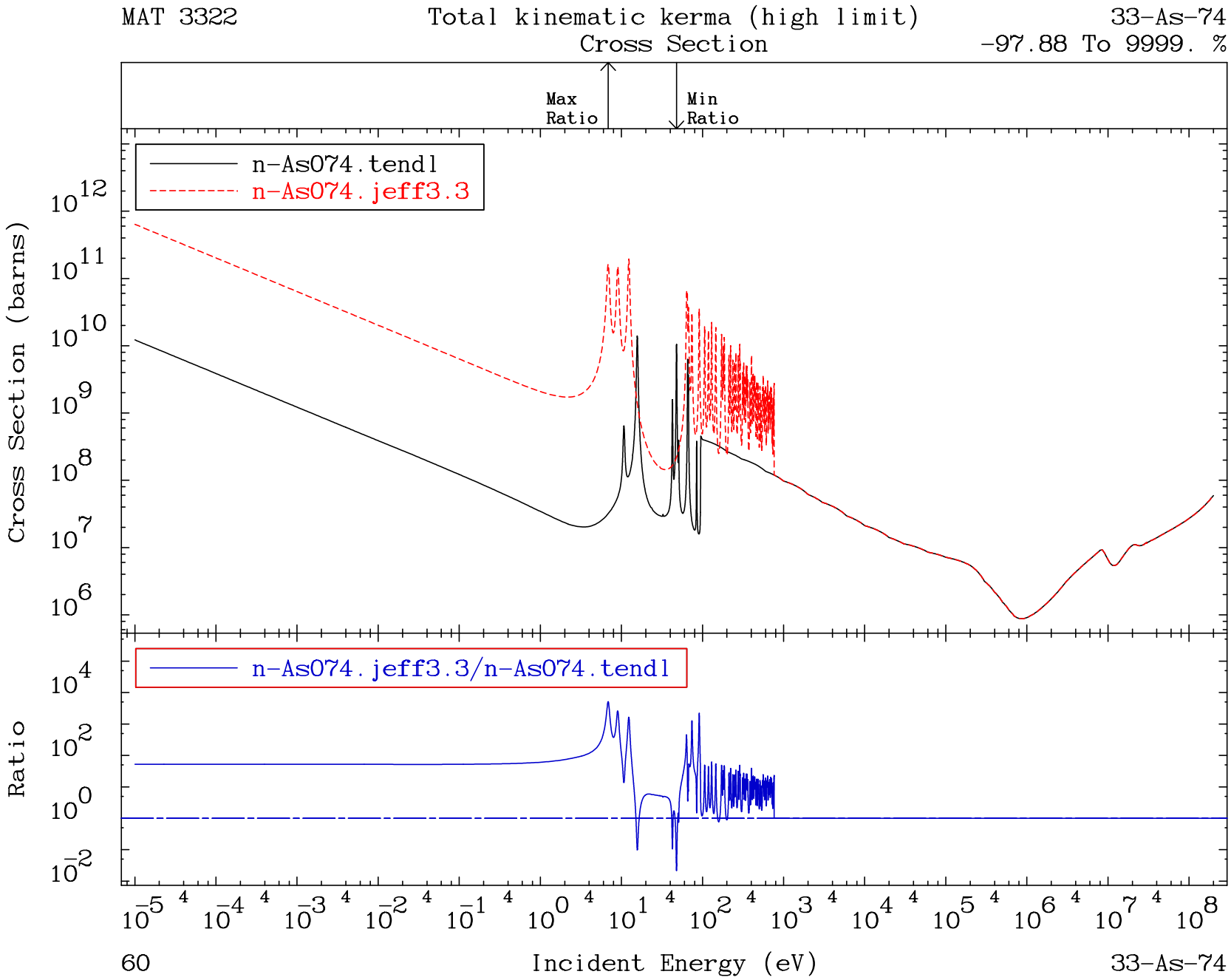

MAT 3322
Kerma non-elastic (all but mt2)
Cross Section
33-As-74
-97.89 To 9999. %
Max Ratio
Min Ratio
n-As074.tendl
n-As074.jeff3.3
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
Incident Energy (eV)
55
33-As-74

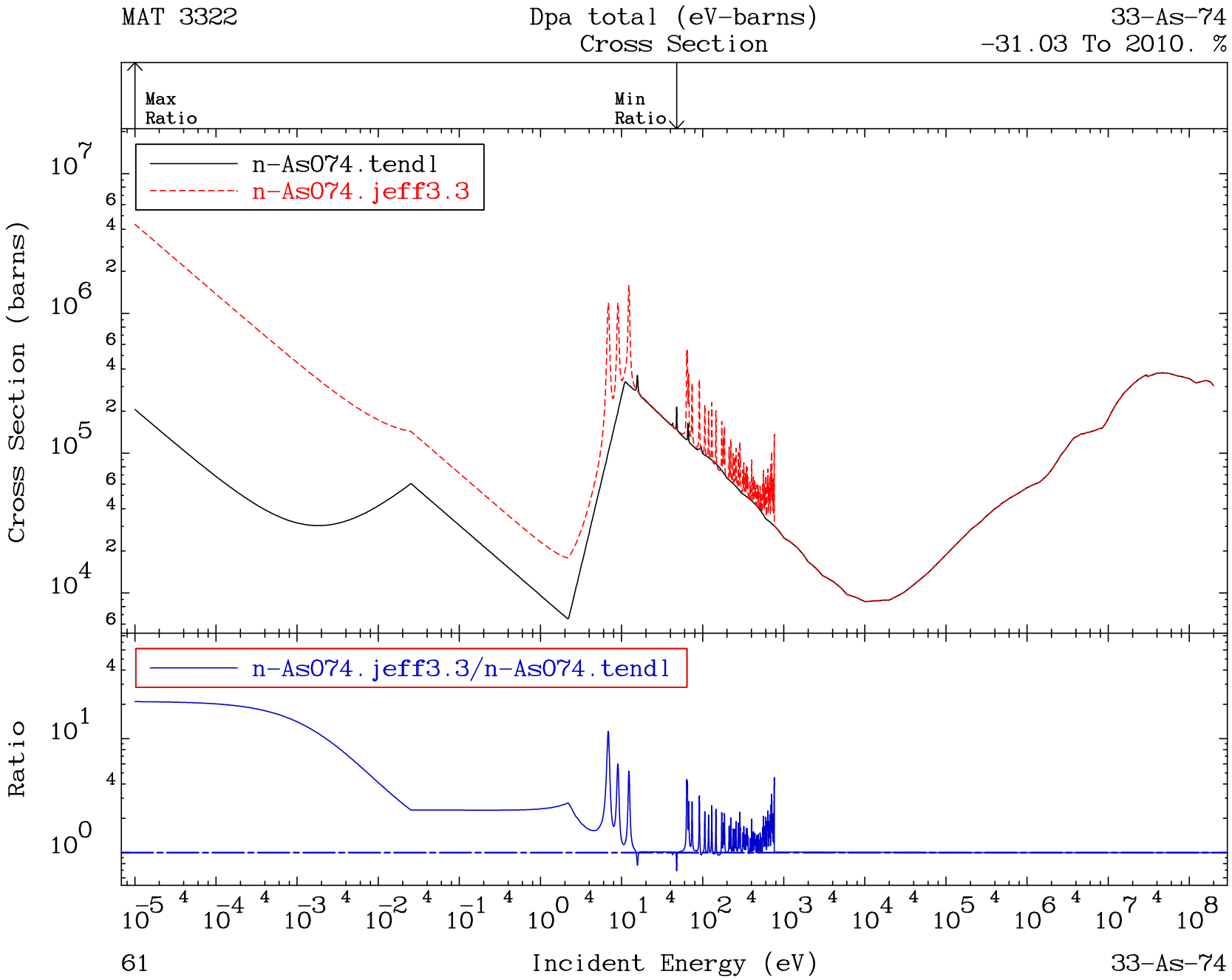

MAT 3322
Kerma inelastic (mt51-91)
Cross Section
33-As-74
-0.006 To 0.055 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 185.55 keV
n-As074.jeff3.3 Threshold 185.55 keV
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
Incident Energy (eV)
56
33-As-74

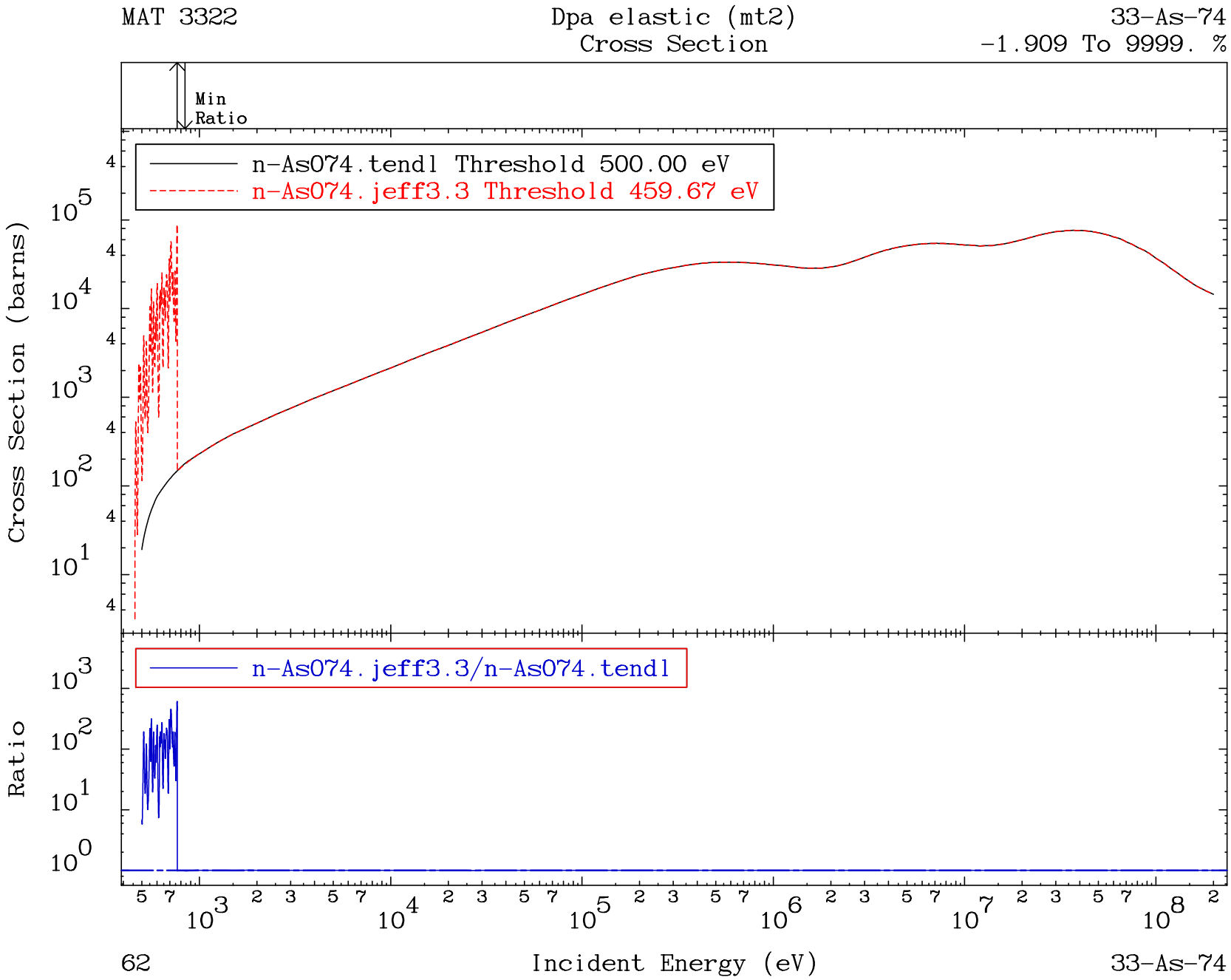

MAT 3322
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
33-As-74
-0.006 To 0.055 %
Min Ratio
Max Ratio
n-As074.tendl
n-As074.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
57
Incident Energy (eV)
33-As-74

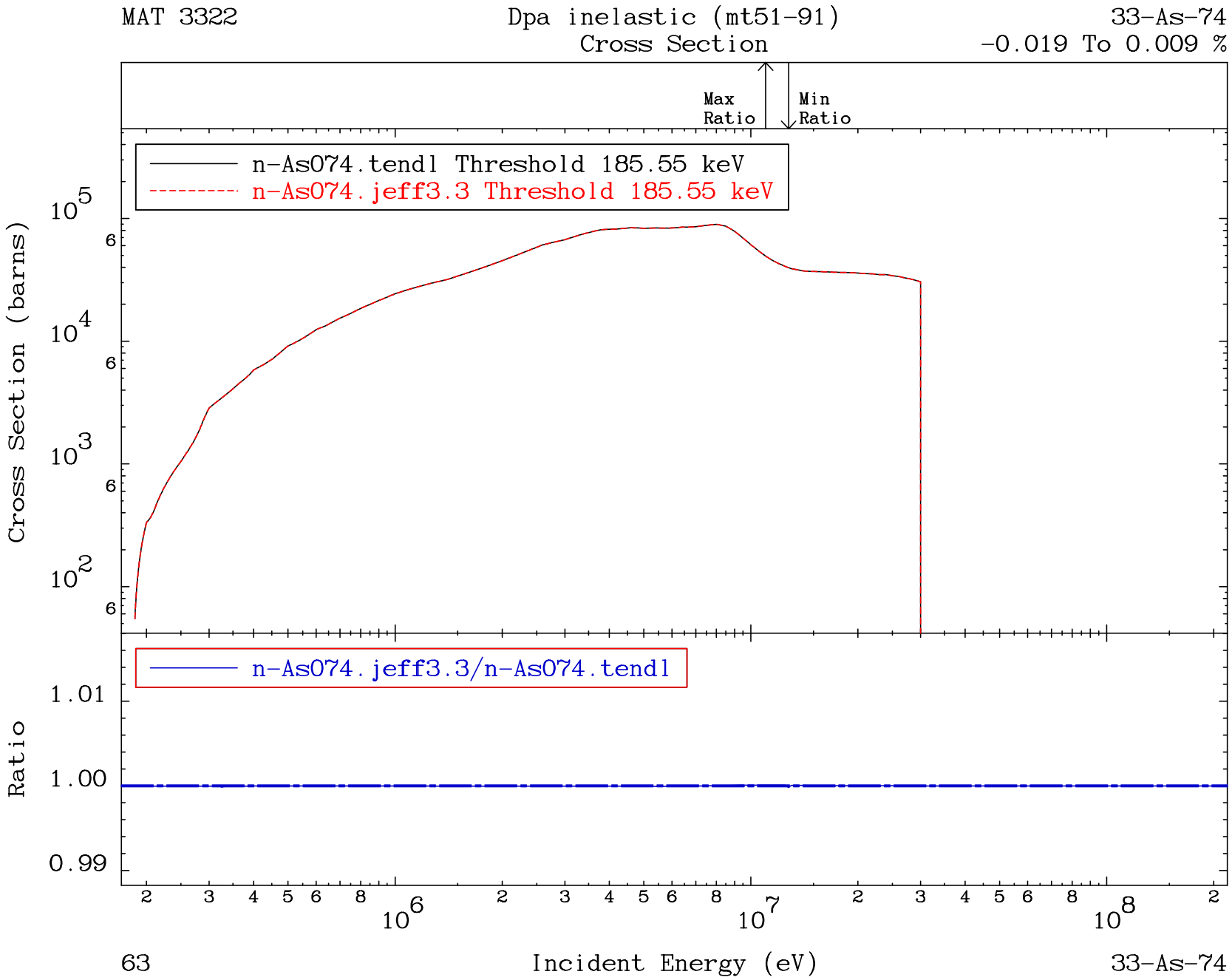

MAT 3322
Kerma capture (mt102)
Cross Section
33-As-74
-98.05 To 9999. %
Min Ratio
Max Ratio
n-As074.tendl
n-As074.jeff3.3
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
Incident Energy (eV)
58
33-As-74

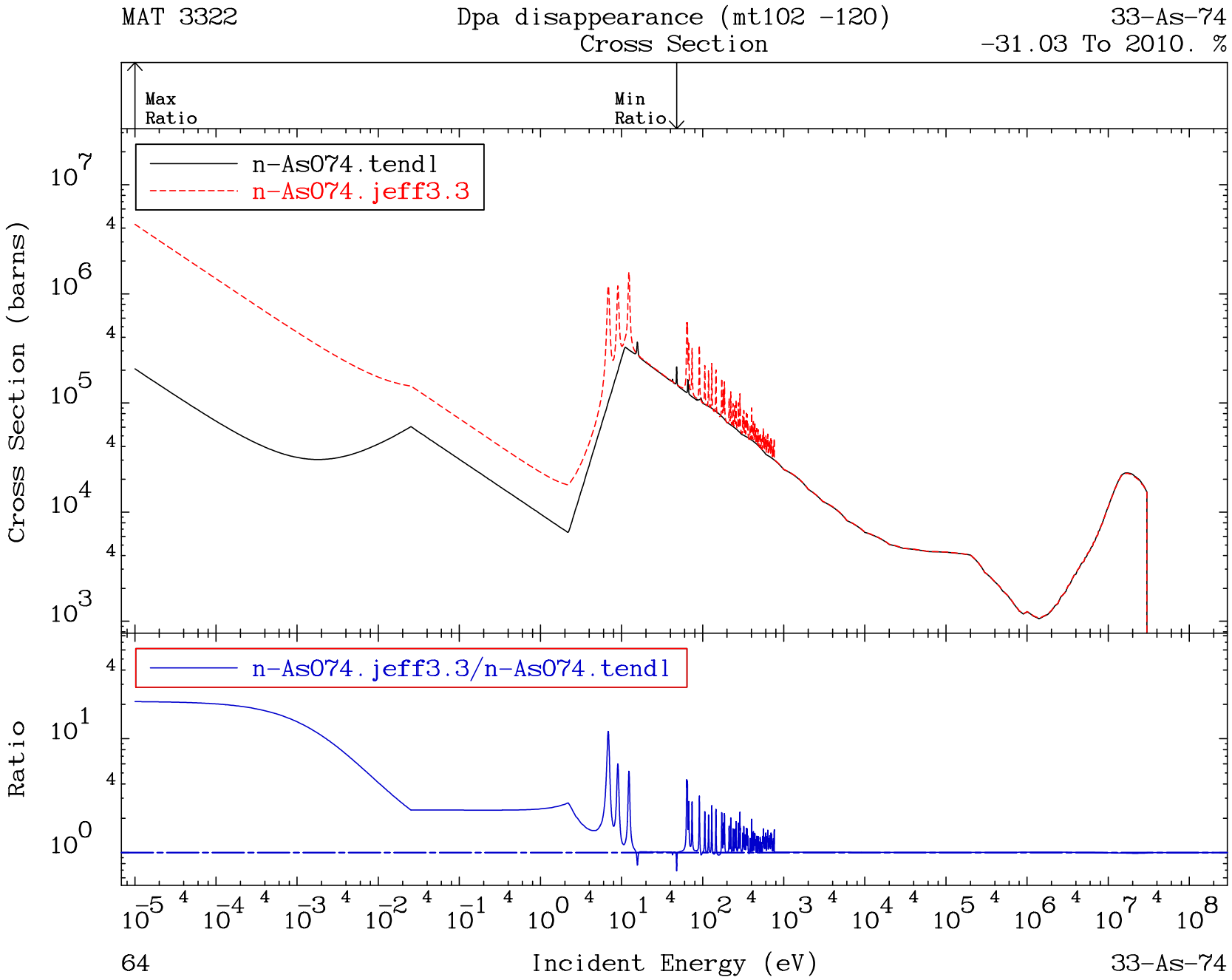

MAT 3322
Total photon (eV-barns)
Cross Section
33-As-74
-97.99 To 9999. %
Max Ratio
Min Ratio
n-As074.tendl
n-As074.jeff3.3
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
59
Incident Energy (eV)
33-As-74

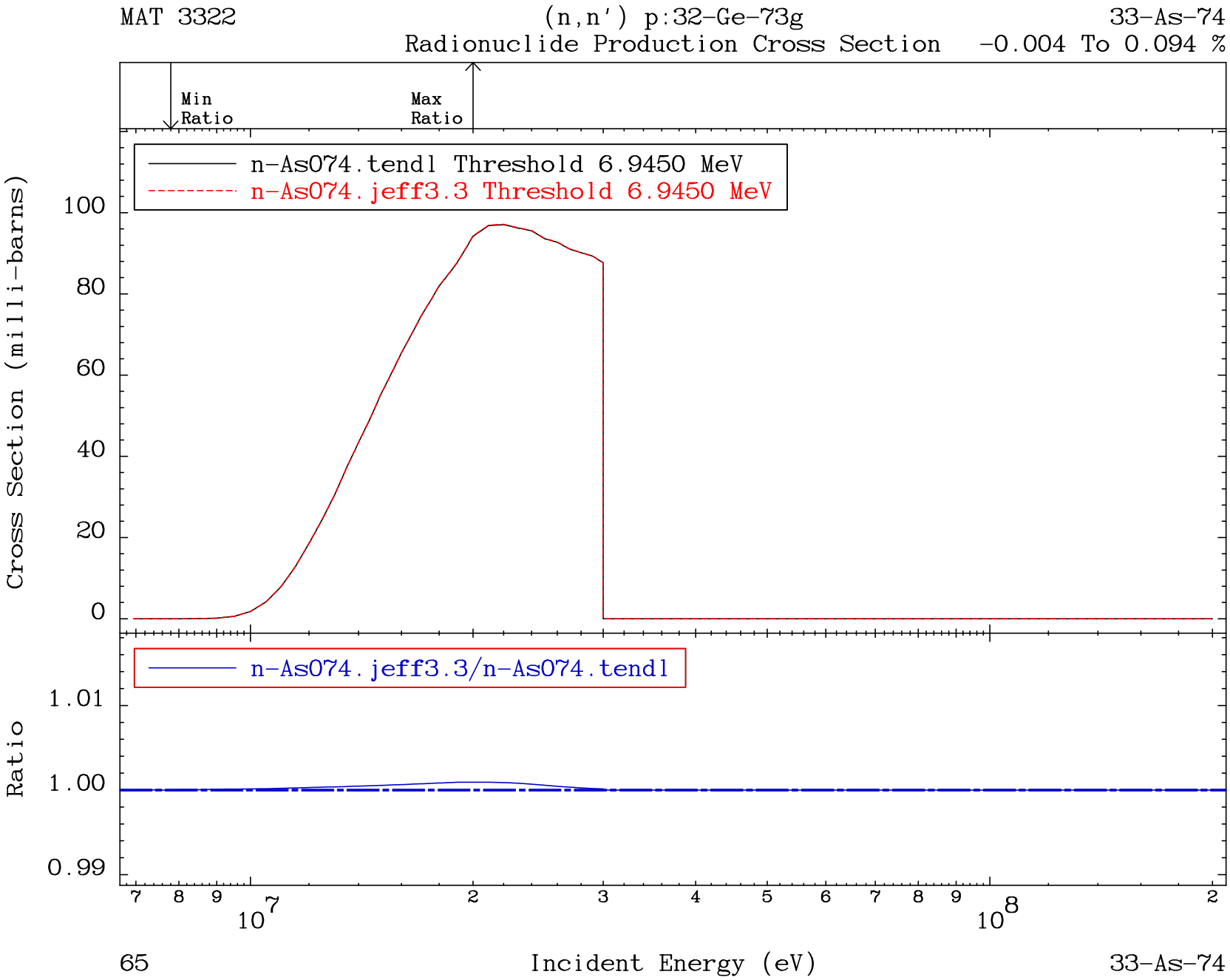

MAT 3322
Total kinematic kerma (high limit)
Cross Section
33-As-74
-97.88 To 9999. %
Max Ratio
Min Ratio
n-As074.tendl
n-As074.jeff3.3
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
Incident Energy (eV)
60
33-As-74

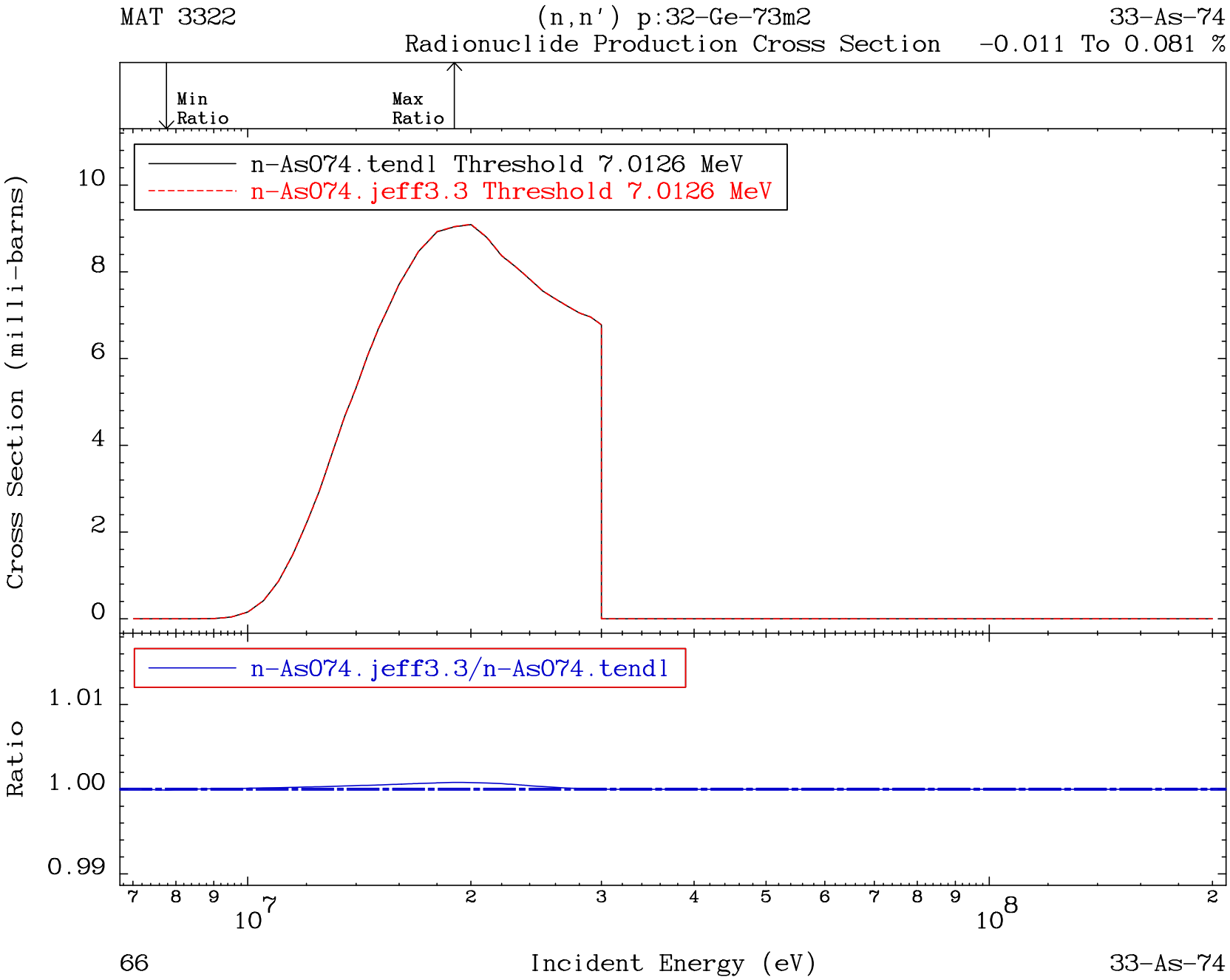

MAT 3322
Dpa total (eV-barns)
Cross Section
33-As-74
-31.03 To 2010. %
Max Ratio
Min Ratio
n-As074.tendl
n-As074.jeff3.3
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
61
Incident Energy (eV)
33-As-74

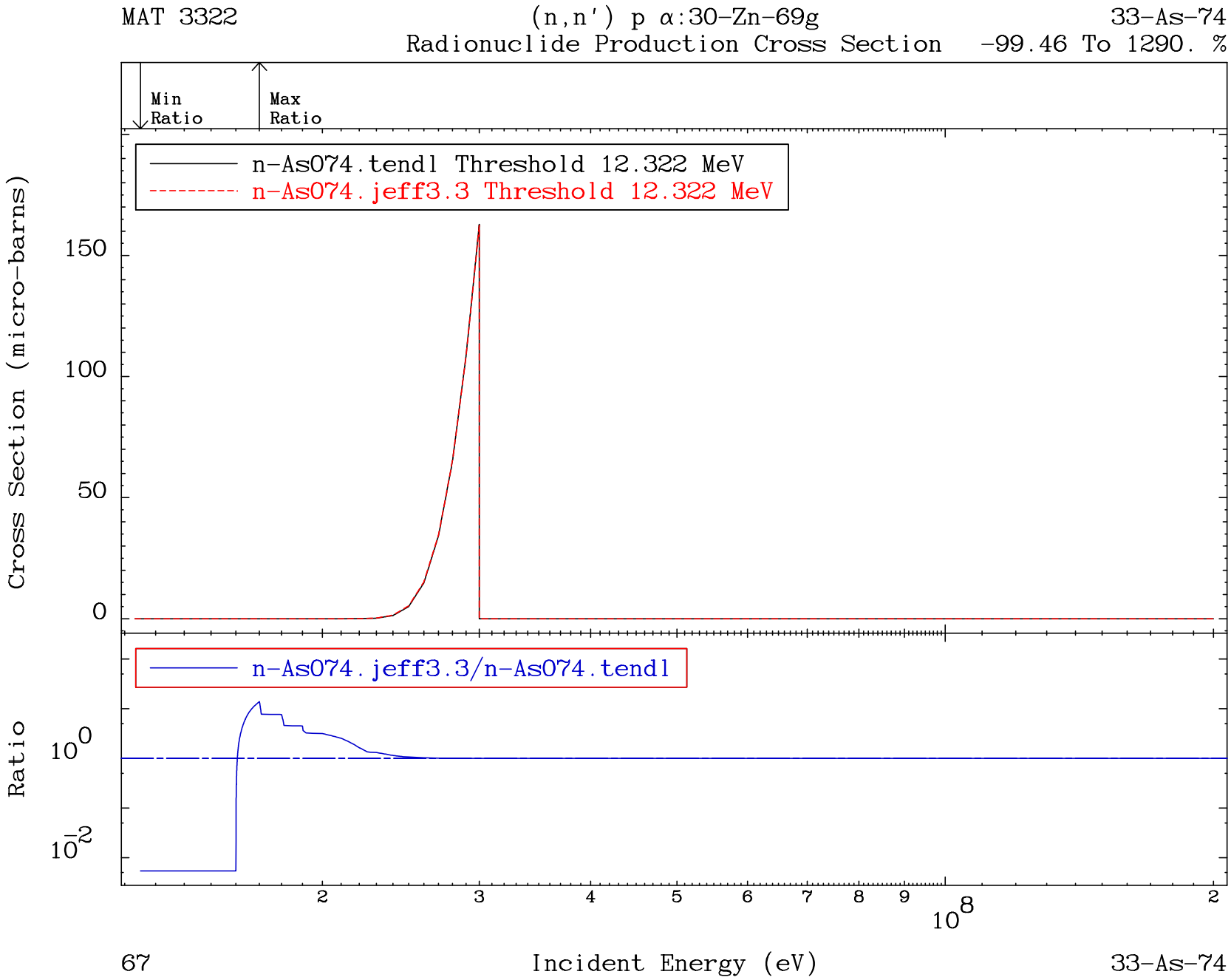

MAT 3322
Dpa elastic (mt2)
Cross Section
33-As-74
-1.909 To 9999. %
Min
Ratio
n-As074.tendl Threshold 500.00 eV
n-As074.jeff3.3 Threshold 459.67 eV
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
Incident Energy (eV)
62
33-As-74

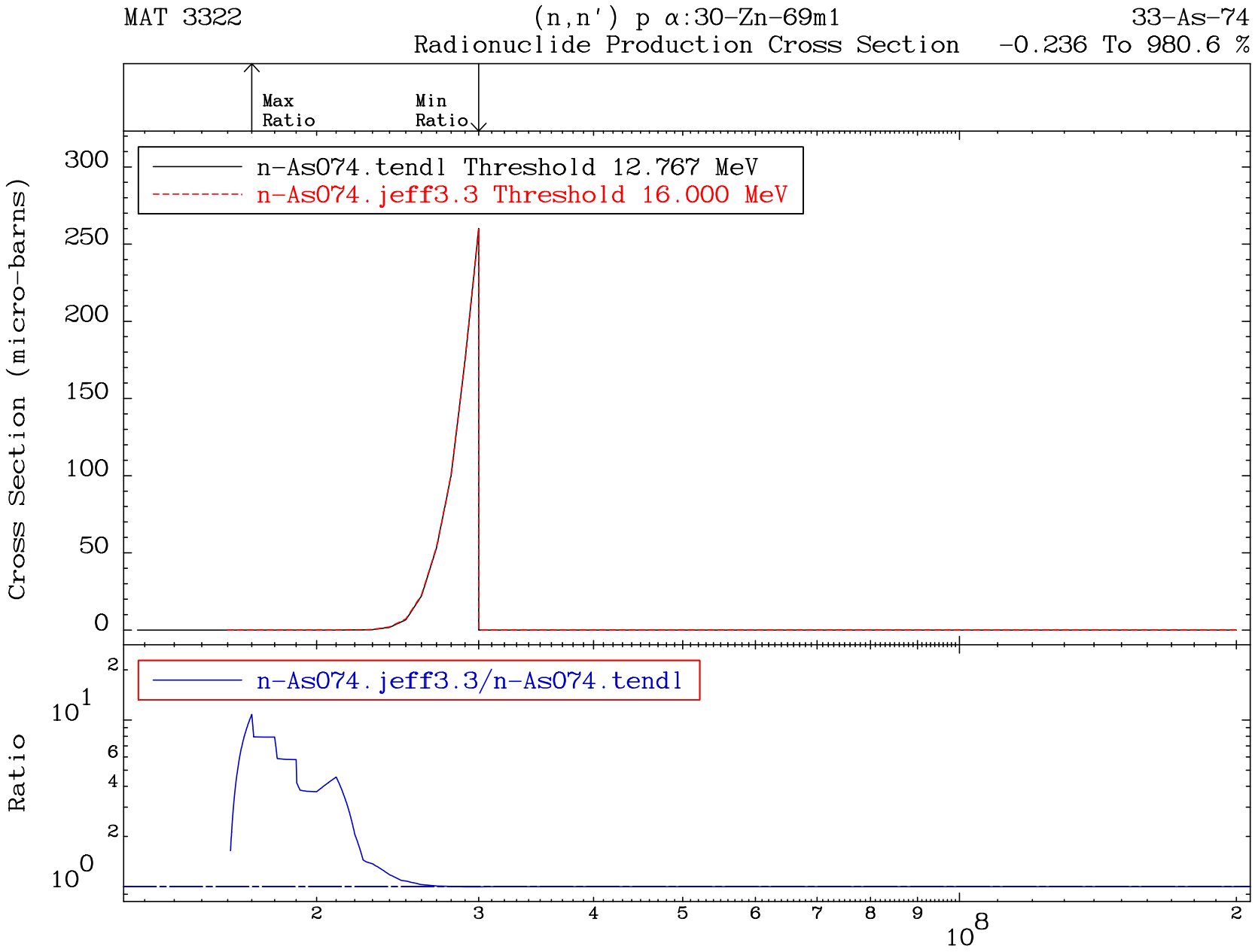

MAT 3322
Dpa inelastic (mt51-91)
Cross Section
33-As-74
-0.019 To 0.009 %
Max Ratio
Min Ratio
n-As074.tendl Threshold 185.55 keV
n-As074.jeff3.3 Threshold 185.55 keV
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
Incident Energy (eV)
63
33-As-74

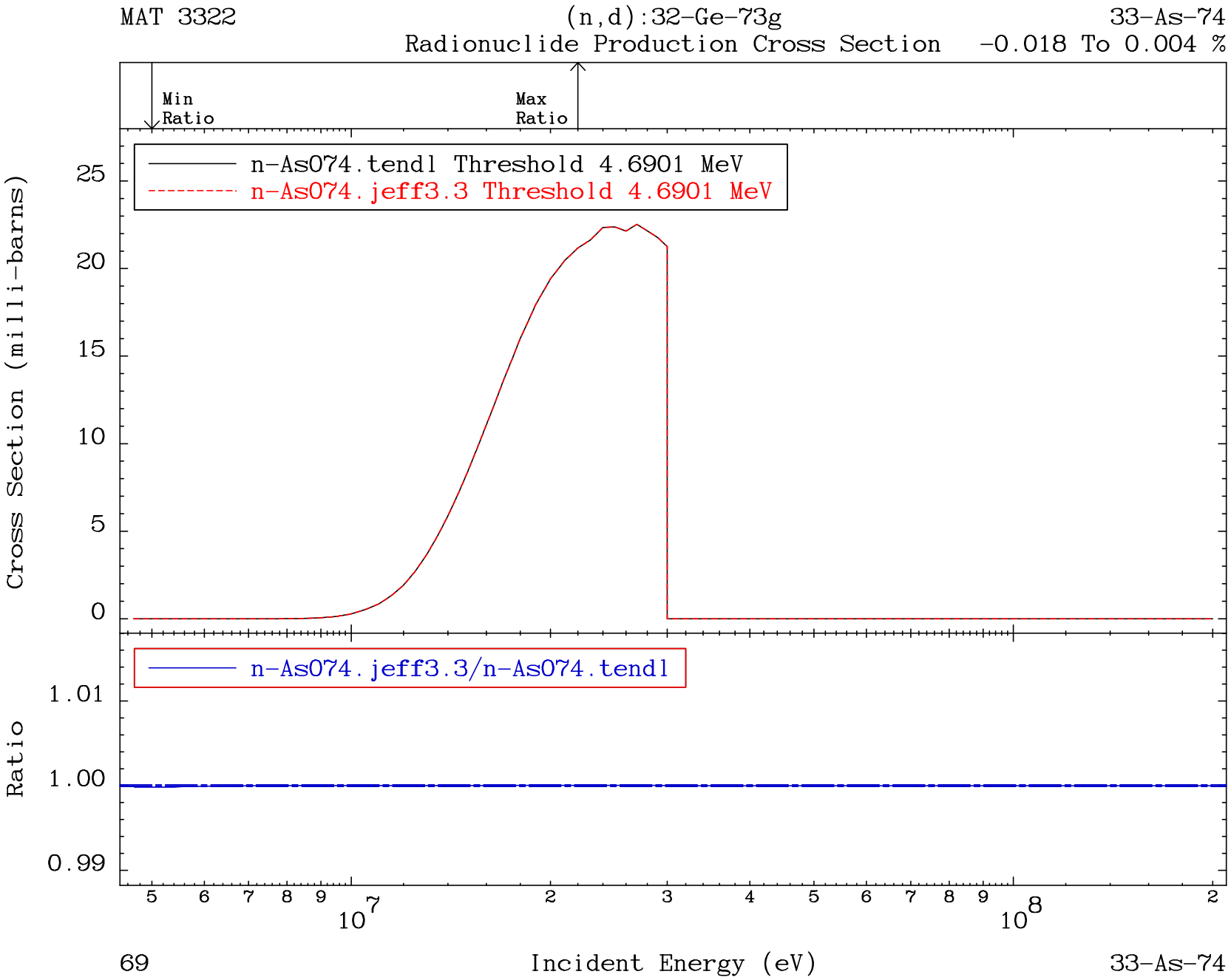

MAT 3322
Dpa disappearance (mt102 -120)
Cross Section
33-As-74
-31.03 To 2010. %
Max Ratio
Min Ratio
n-As074.tendl
n-As074.jeff3.3
Cross Section (barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
Incident Energy (eV)
64
33-As-74

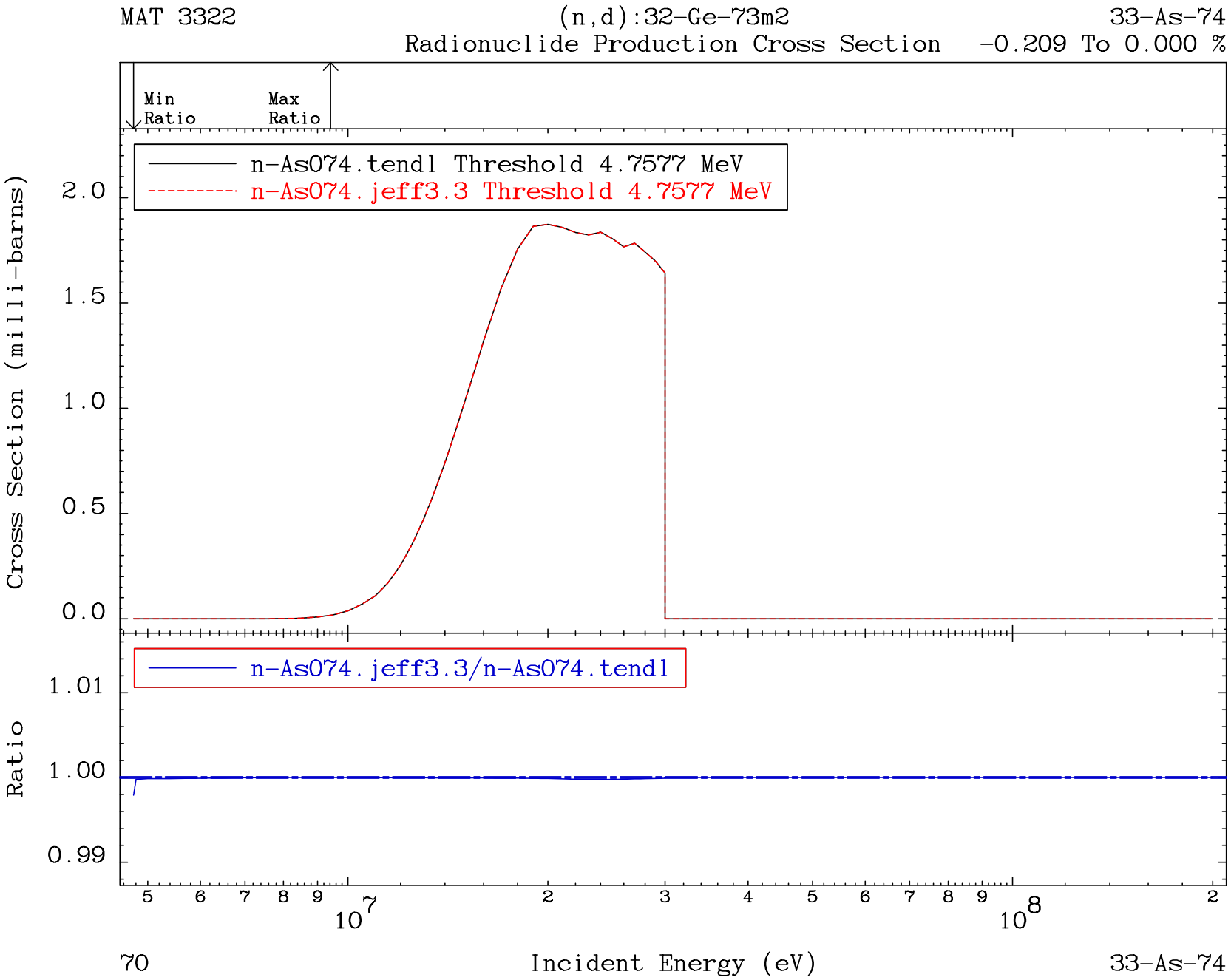

MAT 3322
(n,n') p:32-Ge-73g
33-As-74
Radionuclide Production Cross Section -0.004 To 0.094 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 6.9450 MeV
n-As074.jeff3.3 Threshold 6.9450 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
65
Incident Energy (eV)
33-As-74

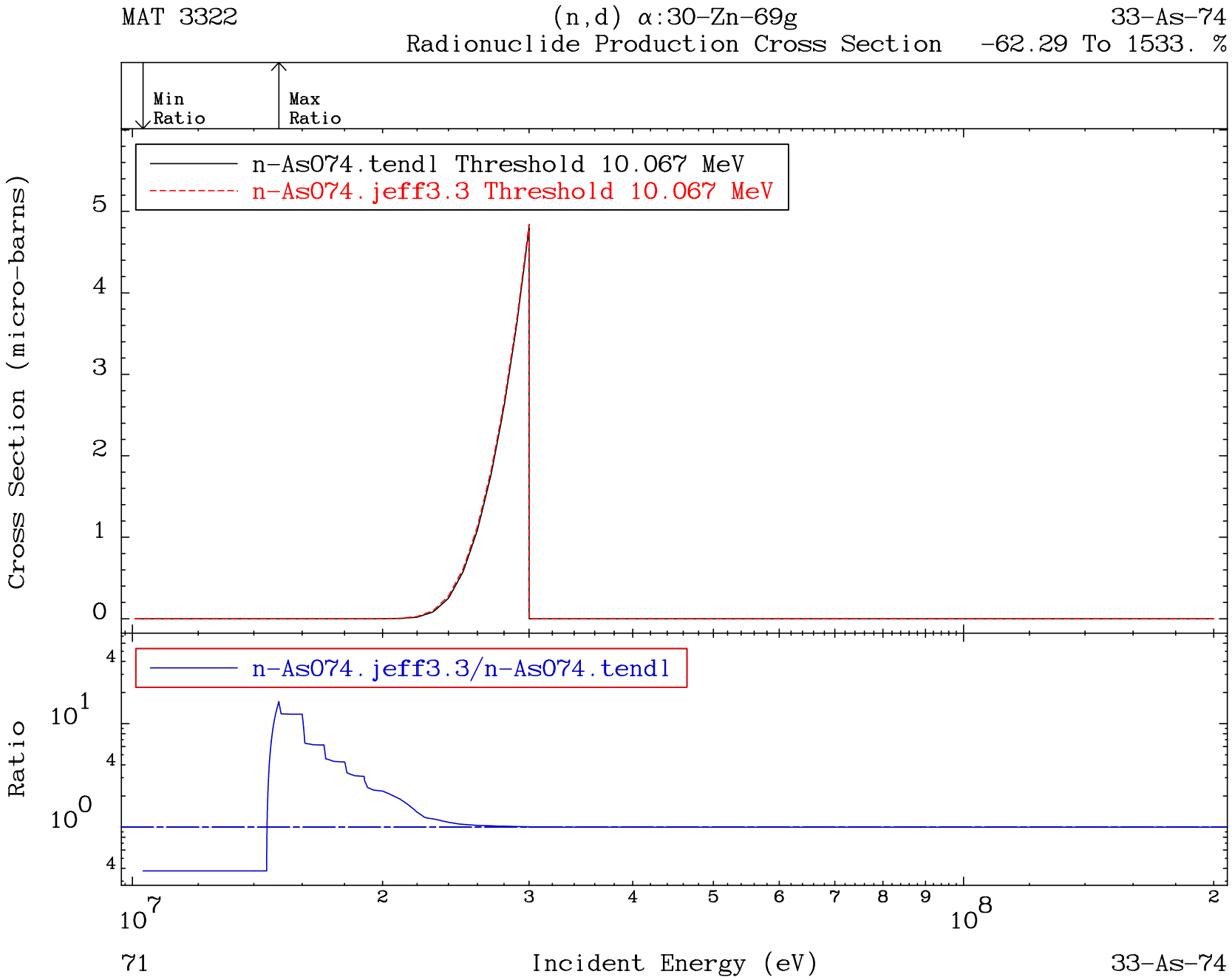

MAT 3322
(n,n') p:32-Ge-73m2
33-As-74
Radionuclide Production Cross Section -0.011 To 0.081 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 7.0126 MeV
n-As074.jeff3.3 Threshold 7.0126 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
66
Incident Energy (eV)
33-As-74

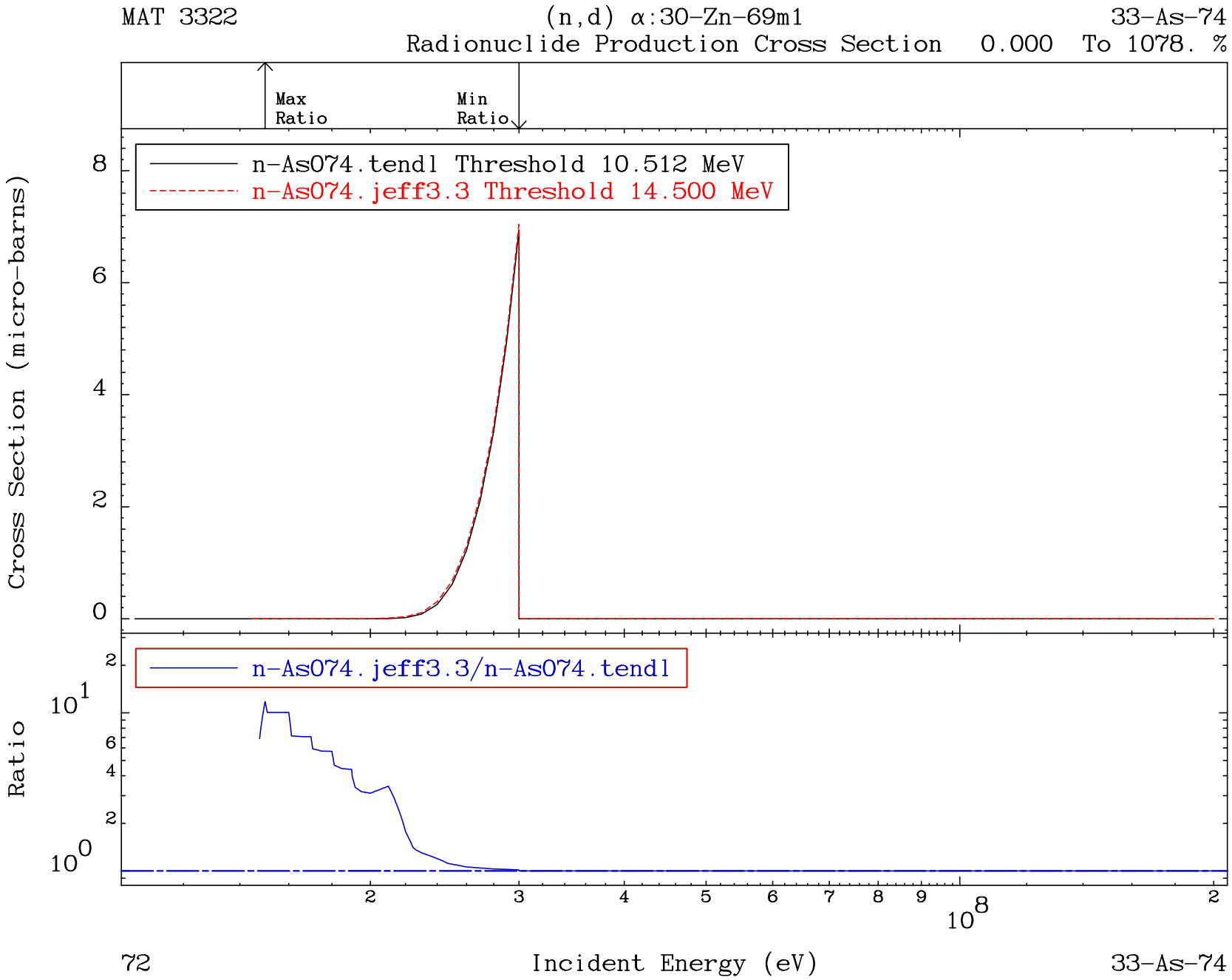

MAT 3322
(n,n') p α:30-Zn-69g
33-As-74
Radionuclide Production Cross Section -99.46 To 1290. %
Min Ratio
Max Ratio
n-As074.tendl Threshold 12.322 MeV
n-As074.jeff3.3 Threshold 12.322 MeV
Cross Section (micro-barns)
150
100
50
0
n-As074.jeff3.3/n-As074.tendl
Ratio
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
67
Incident Energy (eV)
33-As-74


MAT 3322
(n,n') p α:30-Zn-69m1
33-As-74
Radionuclide Production Cross Section -0.236 To 980.6 %
Max Ratio
Min Ratio
n-As074.tendl Threshold 12.767 MeV
n-As074.jeff3.3 Threshold 16.000 MeV
Cross Section (micro-barns)
300
250
200
150
100
50
0
n-As074.jeff3.3/n-As074.tendl
Ratio
2
10^1
6
4
2
10^0
2
3
4
5
6
7
8
9
10^8
2
68
Incident Energy (eV)
33-As-74


MAT 3322
(n,d):32-Ge-73g
33-As-74
Radionuclide Production Cross Section -0.018 To 0.004 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 4.6901 MeV
n-As074.jeff3.3 Threshold 4.6901 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
69
Incident Energy (eV)
33-As-74


MAT 3322
(n,d):32-Ge-73m2
33-As-74
Radionuclide Production Cross Section -0.209 To 0.000 %
Min Ratio
Max Ratio
n-As074.tendl Threshold 4.7577 MeV
n-As074.jeff3.3 Threshold 4.7577 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-As074.jeff3.3/n-As074.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
70
Incident Energy (eV)
33-As-74


MAT 3322
(n,d) α:30-Zn-69g
33-As-74
Radionuclide Production Cross Section -62.29 To 1533. %
Min Ratio
Max Ratio
n-As074.tendl Threshold 10.067 MeV
n-As074.jeff3.3 Threshold 10.067 MeV
Cross Section (micro-barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
Incident Energy (eV)
71
33-As-74


MAT 3322
(n,d) α:30-Zn-69m1
33-As-74
Radionuclide Production Cross Section 0.000 To 1078. %
Max Ratio
Min Ratio
n-As074.tendl Threshold 10.512 MeV
n-As074.jeff3.3 Threshold 14.500 MeV
Cross Section (micro-barns)
n-As074.jeff3.3/n-As074.tendl
Ratio
Incident Energy (eV)
72
33-As-74